

UNITED STATES GOVERNMENT

1 2 JUN 1985

2-Way Memo

Subject: RCRA Investigation at Vandenberg AFB
Lompoc, CA

To : Philip Bobel, Chief
Toxics and Waste Programs Branch T-2

INSTRUCTIONS

Use routing symbols whenever possible.

SENDER (Originator of message):

Use brief, informal language.

Conserve space.

Forward original and one copy.

RECEIVER (Replier to message):

Reply below the message, keep one copy, return one copy.

DATE OF MESSAGE	ROUTING SYMBOL
June 10, 1985	
SIGNATURE OF ORIGINATOR	
<i>Tamara Brode</i>	
TITLE OF ORIGINATOR	
Environmental Engineer FOLD.	

FOLD MESSAGE

Enclosed is a RCRA inspection report for Vandenberg AFB. The facility operates a containerized hazardous waste storage area. The only potential problem, besides the normal paper work inadequacies, is their construction of a new storage area. Right now, they have no interim status or a permit for it. They began construction in 1984. The State has been working closely with them. It has not yet been brought to their attention that this is a "New Facility".

REPLY

From : Tamara Brode T-3-2
thru: Kathleen Shimmin, Chief
Field Operations Branch T-3

DATE OF REPLY	ROUTING SYMBOL
SIGNATURE OF REPLIER	
TITLE OF REPLIER	

1. RETAINED BY ADDRESSEE
5027-107

OPTIONAL FORM 27 (Rev. 7-81)
GSA FPMR (41 CFR) 101-11.6
NSN 7540-00-082-2447

RCRA INSPECTION REPORT
ENVIRONMENTAL PROTECTION AGENCY, REGION 9
TOXICS AND WASTE MANAGEMENT DIVISION
FIELD OPERATIONS BRANCH

Purpose: RCRA Investigation

Facility: Vandenberg Air Force Base
Lompoc, CA 93436

Facility ID Number: CA9570025149

Report Number: R(85)E086

Date of Inspection: February 5, 1985

EPA Investigators: Tamara Jo Brode
Environmental Engineer

Daniel A. Horgan
Environmental Protection Specialist

Frances Schultz
Environmental Scientist

Facility Representatives: George Sundstrom
Chief, Environmental Planning

Bradley E. Hagemann
Environmental Engineer

Report Prepared By: Tamara Jo Brode

Report Date: June 6, 1985

BACKGROUND

Vandenberg AFB, notified as a TSD facility in November of 1980. The Part A indicates that the facility stores hazardous waste in containers prior to disposal at an off-site facility.

INVESTIGATION

Vandenberg generates a variety of hazardous wastes including ignitable, corrosive, toxic, reactive, halogenated and non-halogenated solvent, listed and acutely hazardous wastes. All wastes are drummed and identified by the generating entity. The drums are brought to a collection/accumulation area where they are checked to ensure that they are properly labeled and packed. In less than 90 days, the drums are removed and taken to the staging area at SLC-1E where DPDO takes custody of them. After DPDO receives them, the drums are stored inside the interim status storage area.

Vandenberg's closure plan indicates that closure of SLC-1E will take place beginning September 30, 1985, the last day to receive hazardous waste. The plan also indicates that the drums may be transferred to "the newly constructed, conforming-storage facility on base". Vandenberg is in the process of obtaining an ISD or a Part B from the California DHS for this facility.

The collection/accumulation point located at SLC-6 was inspected and found to contain properly labeled drums that had been accumulated for less than 90 days.

POTENTIAL VIOLATIONS

- 40 CFR 265.15 (d) Inspection log does not include the time of the inspection.
- 40 CFR 265.52 (d) Contingency Plan does not include a list of names, addresses and phone numbers (office and home) of all persons qualified to act as emergency coordinator.
- 40 CFR 265.52 (e) Contingency Plan does not include a list of all emergency equipment at the facility and the location and a physical description of each item on the list and a brief outline of its capabilities.
- 40 CFR 265.112 (c) Facility did not submit Closure Plan to California DHS by March 30, 1985, (180 days prior to the date closure is expected to begin).

ATTACHMENTS

- A) Photographs
- B) RCRA Checklist
- C) Waste Analysis Plan
- D) Operations Plan
- E) Inspection Log
- F) Contingency Plan
- G) Closure Plan



DATE: 2/5/85

NAME: BRODE

DESCRIPTION: STORAGE FACILITY (SLC-1E)

A) FLAMMABLES

B) CORROSIVES



DATE: 2/5/85

NAME: BRODE

DESCRIPTION: FLAMMABLE WASTES
LOCATED IN SLC-1E



DATE: 2/5/85 NAME: BRODE

DESCRIPTION: STAGING AREA FOR DRUMS
-DRUMS TAKES CUSTODY



DATE: 2/5/85 NAME: BRODE

DESCRIPTION: CLOSE-UP OF ABOVE
-DRUMS ARE MOVED FROM HERE INTO SLC-1E



DATE: 2/5/85 NAME: BRODE
 DESCRIPTION: FLAMMABLE WASTES
 LOCATED WITHIN SLC-1E



DATE: 2/5/85 NAME: BRODE
 DESCRIPTION: COLLECTION/ACCUMULATION
 POINT LOCATED AT SLC-6



DATE: 2/5/85 NAME: BRODE
 DESCRIPTION: MORE OF THE TEMPORARY
 STORAGE AREA AT SLC-6



DATE: 2/5/85 NAME: BRODE
 DESCRIPTION: ANOTHER VIEW OF
 SLC-6

HAZARDOUS WASTE

FEDERAL LAW PROHIBITS IMPROPER DISPOSAL

IF FOUND, CONTACT THE NEAREST POLICE, OR
PUBLIC SAFETY AUTHORITY, OR THE
U.S. ENVIRONMENTAL PROTECTION AGENCY

PROPER D.O.T.
SHIPPING NAME TRICHLOROETHANE (UN) OR NA 2831

GENERATOR INFORMATION:

NAME 4392 ASG/DEV

ADDRESS SAC-6

CITY VANDENBERG AFB STATE CA ZIP 92837

EPA
ID NO CA 957025149

EPA
WASTE NO. U 226

ACCUMULATION
START DATE 4 FEB 85

MANIFEST
DOCUMENT NO. _____

HANDLE WITH CARE!
CONTAINS HAZARDOUS OR TOXIC WASTES

STYLE 9044

© LABELMASTER, CHICAGO, IL 60648

DATE: 2/5/85 NAME: BRODE

DESCRIPTION: PROPERLY LABELED
DRUM LOCATED IN TEMPORARY STORAGE

III. General Facility Standards:
(Part 265 Subpart B)

	<u>Yes</u>	<u>No</u>	<u>Comments</u>
(A) Required Notices: ---			
1. Has the RA been notified regarding the receipt of H.W. from a foreign source (265.12a)?	—	—	N/A
2. Before transferring ownership, has the facility notified the new owners in writing of the requirements of Parts 265 and 122 (265.12b)?	—	—	N/A
(B) General Waste Analysis:			
1. Has the facility obtained a detailed chemical and physical analysis of each H.W. (265.13a.1)?	X	—	<i>Group II wastes</i> ↓ No - they know what it is from what generated it - is not, then they will test it.
2. Does the analysis contain all information that must be known to properly treat, store or dispose of the H.W. (265.13a.1)?	X	—	
3. Does the facility have records documenting the required H.W. analysis, e.g., lab reports, <u>published data, generator supplied data</u> (265.13a.2)?	X	—	
4. Has the analysis been repeated to ensure that it is accurate and up-to-date (265.13a.3)?	X	—	Yes
5. Is the analysis repeated when there is a change in the process (265.13a.3)?	X	—	Yes
6. For off-site facilities, is the analysis repeated when the H.W. received does not match the H.W. designated on the manifest (265.13a.3)?	—	—	N/A
7. For off-site facilities, does the facility inspect or analyze each movement of H.W. to verify that the H.W. received matches the identity of the H.W. specified on the manifest (265.13a.4)?	—	—	N/A

III. General Facility Standards: - Continued
(Part 265 Subpart B)

	<u>Yes</u>	<u>No</u>	<u>Comments</u>
8. Does the facility have a detailed waste analysis plan (265.13b)?	<u>X</u>	—	_____
9. Does the facility follow the procedures specified in the waste analysis plan (265.13b)?	<u>X</u>	—	_____
10. Does the waste analysis plan contain the following elements:			
a. Parameters of analysis of each H.W. handled (265.13b.1)?	<u>X</u>	—	_____
b. Rationale for the selection of each parameter (265.13b.2)?	<u>X</u>	—	_____
c. Test methods used to obtain a representative sample of H.W. (265.13b.3)?	<u>X</u>	—	_____
d. Frequency which each analysis will be repeated (265.13b.4)?	<u>X</u>	—	_____
e. For off-site facilities, the analysis that generators have agreed to supply (265.13b.5)?	—	—	<u>N/A</u>
11. For off-site facilities, does the plan specify procedures for inspection or analysis of each movement of H.W. (265.13c)?	—	—	<u>N/A</u>
12. For off-site facilities, does the plan contain the following elements:			
a. Description of procedures used to identify each movement of H.W. (265.13c.1)?	—	—	<u>N/A</u>
b. Description of the sampling method used to obtain a representative sample of the H.W. (265.13c.2)?	—	—	_____

(C) Security:

1. Do security measures include:			
a. 24-hour surveillance (265.14b.1)?	<u>X</u>	—	_____

III. General Facility Standards: - Continued
(Part 265 Subpart B)

	<u>Yes</u>	<u>No</u>	<u>Comments</u>
b. Artificial or natural barriers and controlled entry (265.14b.2)?	<u>X</u>	—	_____
c. Signs with the legend "Danger-Unauthorized Personnel Keep Out" posted at entrances to active portions of facility (265.14c)?	<u>X</u>	—	_____
(D) General Inspection Requirements:			
1. Does the facility inspect for equipment malfunctions and deterioration, operator errors, and H.W. discharges (265.15a)?	<u>X</u>	—	_____
2. Does the facility follow a written inspection schedule (265.15b.1)?	<u>X</u>	—	_____
3. Is the schedule kept at this facility (265.15b.2)?	<u>X</u>	—	_____
4. Does the schedule identify types of problems that are expected from malfunction, operator error, deterioration or discharges of all: (265.15b.3)			
a. monitoring equipment?	—	—	N/A
b. safety, emergency equipment?	<u>X</u>	—	_____
c. security equipment?	<u>X</u>	—	_____
d. operating and structural equipment?	<u>X</u>	—	_____
5. Does the schedule indicate the frequency of inspection for each item (265.15b.4)?	<u>X</u>	—	_____
6. Does the schedule include daily inspections of loading and unloading areas (265.15b.4)?	<u>X</u>	—	_____
7. Has the facility taken remedial action to correct the problems revealed on an inspection (265.15c)?	<u>X</u>	—	_____

III. General Facility Standards: - Continued
(Part 265 Subpart B)

	<u>Yes</u>	<u>No</u>	<u>Comments</u>
8. Are inspections recorded in an inspection log (265.15d)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
9. Does the log include: (265.15d)			
a. Date and time of inspection?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	(no time)
b. Name of inspector?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
c. Observations recorded?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	not all
d. Date and nature of repairs or other remedial actions?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	not all
10. Are inspection records kept for at least 3 years (265.15d)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
(E) Personnel Training:			
1. Does the facility have a personnel training program (265.16a.1)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
2. Is it directed by a person trained in H.W. management procedures (265.16a.2)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
3. Does the program include training in: (265.16a.3)			
a. Procedures for using, inspecting, repairing and replacing emergency and monitoring equipment?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
b. Emergency procedures including contingency plan implementation?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
4. Do new personnel receive required training within 6 months (265.16b)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
5. Do personnel take part in an annual review of the initial training (265.16c)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

III. General Facility Standards: - Continued
(Part 265 Subpart B)

	<u>Yes</u>	<u>No</u>	<u>Comments</u>
6. Do personnel training records include: (265.16d)			
a. Job titles?	<u>X</u>	—	_____
b. Job Descriptions?	<u>X</u>	—	_____
c. Descriptions of training?	<u>X</u>	—	_____
b. Records of training?	<u>X</u>	—	_____
(F) Requirements For Ignitable, Reactive, Or Incompatible Wastes:			
1. Are the following precautions taken to prevent accidental ignition or reaction: (265.17a)			
a. Separation and protection from ignition sources?	<u>X</u>	—	_____
b. No smoking signs in hazard areas?	<u>X</u>	—	_____
2. Is the T/S/D of ignitable, reactive and incompatible waste conducted so that it does not: (265.17b)			
a. Generate extreme heat or pressure, fire or explosion, or violent reaction?	<u>X</u>	—	_____
b. Produce uncontrolled toxic or flammable mists, fumes, dusts or gases?	<u>X</u>	—	_____
c. Damage structural integrity of H.W. containment devices? (e.g., tanks, containers, liners)	<u>X</u>	—	_____
d. Threaten human health or the environment?	<u>X</u>	—	_____

IV. Preparedness and Prevention:
(Part 265 Subpart C)

	<u>Yes</u>	<u>No</u>	<u>Comments</u>
(A) Is the facility designed, constructed, maintained, and operated to minimize the possibility of fire, explosion, or releases of H.W. to the environment (265.31)?	<u>X</u>	—	_____
(B) Required Equipment:			
1. Does the facility have the following equipment where applicable:			
a. Internal communications or alarm systems (265.32a)?	<u>X</u>	—	_____
b. Telephone or 2-way radios at the scene of operation (265.32b)?	<u>X</u>	—	_____
c. Portable fire extinguishers with water, foam, inert gas, dry chemical; spill control and decontamination equipment (265.32c)?	<u>X</u>	—	_____
d. Water at adequate volume and pressure or foam producing equipment or automatic sprinklers (265.32d)?	<u>X</u>	—	_____
(C) Testing And Maintenance Of Equipment:			
1. Does the facility test and maintain emergency equipment in operable condition (265.33)?	<u>X</u>	—	_____
(D) Access To Communications Or Alarm Systems:			
1. Do personnel in areas where H.W. is being handled have immediate access to these systems (265.34)?	<u>X</u>	—	_____
(E) Required Aisle Space:			
1. Is their adequate aisle space for unobstructed movement of fire, spill control and decontamination equipment in an emergency (265.35)?	<u>X</u>	—	_____

IV. Preparedness and Prevention: - Continued
(Part 265 Subpart C)

	<u>Yes</u>	<u>No</u>	<u>Comments</u>
(F) Arrangements With Local Authorities:			
1. Has the facility made the following arrangements:			
a. Arrangements to familiarize police, fire dept., and emergency response team with H.W. operations (265.37a.1)?	<u>X</u>	—	_____
b. Agreements designating primary emergency authority (265.37a.2)?	<u>X</u>	—	_____
c. Agreements with State emergency response teams, contractors and equipment suppliers (265.37a.3)?	<u>X</u>	—	_____
d. Arrangements to familiarize local hospitals with the properties of H.W. and the types of potential injuries and illnesses from exposure to H.W. (265.37a.4)?	<u>X</u>	—	_____
2. Did the facility document in the operating record any refusal by State or local authorities to enter into such arrangements (265.37b)?	—	—	<u>N/A</u>

V. Contingency Plan and Emergency Procedures:
(Part 265 Subpart D)

	<u>Yes</u>	<u>No</u>	<u>Comments</u>
(A) Does the facility have a contingency plan (265.51a)?	<u>X</u>	—	—
(B) Content Of Contingency Plan:			
1. Does the plan describe actions personnel must take to comply with §§ 265.51 & 265.56 in response to fires, explosions, or unplanned releases of H.W. (265.52a)?	<u>X</u>	—	—
2. Does the plan describe arrangements agreed by police, fire dept., hospitals, contractors, and State and local emergency response teams to coordinate emergency services pursuant to § 265.37 (265.52c)?	<u>X</u>	—	—
3. Does the Plan list names, addresses, and phone numbers (office & home) of all persons qualified to act as emergency coordinators (265.52d)? (list in order of responsibility)	—	<u>X</u>	<u>no - name, home address + home #'s</u>
4. Does the plan list all emergency equipment including the location and physical description of each item on the list and a brief outline of its capability (265.52e)?	—	<u>X</u>	—
5. Does the plan include an evacuation plan for personnel and a description of signals to begin evacuation, evacuation routes and alternate routes (265.52f)?	<u>X</u>	—	—
(C) Copies of Contingency Plan:			
1. Is the plan maintained at the facility (265.53a)?	<u>X</u>	—	—
2. Has the plan been submitted to all local emergency organizations (265.53b)?	<u>X</u>	—	—

V. Contingency Plan and Emergency Procedures: - Con't.
(Part 265 Subpart D)

	<u>Yes</u>	<u>No</u>	<u>Comments</u>
(D) Amendment Of Contingency Plan:			
1. Has the plan been reviewed and immediately amended when required (265.54)?	<u>X</u>	—	_____
(E) Emergency Coordinator:			
1. Is the coordinator familiar with all aspects of site operation and emergency procedures (265.55)?	<u>X</u>	—	_____
2. Does the coordinator have authority to carry out the contingency plan (265.55)?	<u>X</u>	—	_____
(F) Emergency Procedures:			
1. If an emergency situation has occurred at this facility, has the emergency coordinator followed the emergency procedures listed in § 265.56 (265.56)?	—	—	<u>N/A</u>

VI. Manifest System, Recordkeeping, and Reporting:
(Part 265 Subpart E)

	<u>Yes</u>	<u>No</u>	<u>Comments</u>
(A) Use of Manifest System:			
1. Does the facility comply with the following manifest requirements:			
a. Sign and date each copy of the manifest (265.71a.1)?	<u>X</u>	—	_____
b. Note any significant * discrepancies in the manifest (265.71a.2)?	<u>X</u>	—	_____
c. Give transporter one copy of the signed manifest (265.71a.3)?	<u>X</u>	—	_____
d. Within 30 days after delivery, send a copy of the manifest to the generator (265.71a.4)?	<u>X</u>	—	_____
2. Are records of past shipments retained for 3 years (265.71a.5)?	<u>X</u>	—	_____
(B) Manifest Discrepancies:			
1. Upon discovering a significant discrepancy, has the facility made an attempt to reconcile the discrepancy with the generator or transporter (265.72b)?	<u>X</u>	—	_____
2. For discrepancies not reconciled within 15 days, has the facility followed the required reporting procedures (265.72b)?	<u>X</u>	—	_____
(C) Operating Record:			
1. Does the facility maintain an operating record (265.73a)?	<u>X</u>	—	_____

* Significant discrepancies are:

1. For bulk waste; variations > 10% in weight
2. For containerized waste; variations > one drum
3. Obvious differences such as waste solvent substituted for waste acid

VI. Manifest System, Recordkeeping, and Reporting: - Con't
(Part 265 Subpart E)

	<u>Yes</u>	<u>No</u>	<u>Comments</u>
2. Does the operating record contain the following information:			
a. A description and the quantity of each waste received (265.73b.1)?	<u>X</u>	—	_____
b. The method(s) and date(s) of its treatment, storage or disposal as required by Appendix I (265.73b.1)?	<u>X</u>	—	_____
c. The location of each waste within the facility and the quantity at each location (265.73b.2)? (This information must include cross-references to specific manifest numbers.)	<u>X</u>	—	_____
d. For disposal facilities, the location and quantity of each waste is recorded on a map or diagram of each cell or disposal area (265.73b.2)?	—	—	<u>N/A</u>
e. Records and results of all waste analysis and trial tests (265.73b.3)?	<u>X</u>	—	_____
f. Reports detailing all incidents that required implementation of the contingency plan (265.73b.4)?	—	—	<u>N/A</u>
g. Records and results of operator inspections (265.73b.5)?	<u>X</u>	—	_____
h. Monitoring data (265.73b.6)?	—	—	<u>N/A</u>
i. All closure and post-closure costs as applicable (265.73b.7)?	—	—	<u>N/A</u>
(D) Availability, Retention, Disposition Of Records:			
1. Are all records including plans available for inspection (265.74a)?	<u>X</u>	—	_____
2. Have copies of records of H.W. disposal locations and quantities under § 265.73b.2 been submitted to the RA and local land authority upon closure of the facility (265.74c)?	<u>X</u>	—	<u>N/A</u>

VIII. Closure and Post-Closure:
(Part 265 Subpart G)

	<u>Yes</u>	<u>No</u>	<u>Comments</u>
(A) Closure Plan:			
1. Does the facility have a closure plan (265.112a)?	<u>X</u>	—	—
2. Does the plan identify the steps necessary to completely or partially close the facility at any point during its intended operating life and to completely close at the end of its intended operating life (265.112a)?	<u>X</u>	—	—
3. Do the steps to close in the plan include: (265.112a)			
a. Pre-treatment of H.W.?	<u>X</u>	—	—
b. Treatment of H.W.?	<u>X</u>	—	—
c. Removal of H.W. from process units?	<u>X</u>	—	—
d. Disposal of H.W.?	<u>X</u>	—	—
e. Decontamination of equipment and structures?	<u>X</u>	—	—
f. Scheduled inspections for closure certification purposes?	<u>X</u>	—	—
3. Does the description of how and when the facility will be closed include the following elements:			
a. Maximum extent of operation which will be unclosed during the life of the facility (265.112a.1)?	<u>X</u>	—	—
For facilities that have designated H.W. management areas inactive prior to Nov. 19, 1980, are records available documenting the cessation of activity or final closure?	—	—	<u>Not Not inspected</u>
Was a Notification of Hazardous Waste Site submitted to EPA as required by § 103c of CERCLA ?	—	—	—

VIII. Closure and Post-Closure: - Continued
(Part 265 Subpart G)

	<u>Yes</u>	<u>No</u>	<u>Comments</u>
b. Estimate of the maximum inventory of H.W. in storage and in treatment at any time during the life of the facility (265.112a.2)?	<u>X</u>	<u> </u>	<u> </u>
c. Does the inventory include the maximum amount of on-site:			
H.W. in surface impoundments?	<u> </u>	<u>X</u>	<u> </u>
H.W. in tanks?	<u> </u>	<u> </u>	<u> </u>
H.W. in piles?	<u> </u>	<u> </u>	<u> </u>
H.W. in containers?	<u>X</u>	<u> </u>	<u> </u>
H.W. in drainage pits or sumps?	<u> </u>	<u> </u>	<u> </u>
Contaminated soil from spills or leaks?	<u> </u>	<u> </u>	<u> </u>
Contaminated soils and liners from non-disposal impoundments?	<u> </u>	<u> </u>	<u> </u>
Contaminated soils from land treatment fields?	<u> </u>	<u> </u>	<u> </u>
Decontamination residues?	<u>X</u>	<u> </u>	<u> </u>
Process residues?	<u> </u>	<u> </u>	<u> </u>
Other (specify)?	<u> </u>	<u> </u>	<u> </u>
d. Decontamination procedures including: (265.112a.3)			
A list of equipment, containers, structures requiring decontamination?	<u>X</u>	<u> </u>	<u> </u>
Sampling and analytical methods for determining whether soil contamination or decontamination residues are H.W.?	<u> </u>	<u>X</u>	<u> </u>
Testing criteria for determining adequacy of clean-up?	<u> </u>	<u>X</u>	<u> </u>
Methods of treatment or disposal of contaminated soils and residues?	<u>X</u>	<u>h</u>	<u> </u>

VIII. Closure and Post-Closure: - Continued
(Part 265 Subpart G)

	<u>Yes</u>	<u>No</u>	<u>Comments</u>
e. Estimate of the expected year of closure (265.112a.4)?	<u>X</u>	_____	_____
f. Schedule for final closure activities (265.112a.4)?	<u>X</u>	_____	_____
g. Does the schedule include:			
Total time required to close?	<u>X</u>	_____	_____
Time required for intervening closure activities? (e.g., Time required for H.W. treatment, disposal, decontamination, and certification inspections.)	<u>X</u>	_____	_____
4. Has the facility amended the plan whenever changes in operating practice or process design affect the plan or there is a change in the expected year of closure (265.112b)? (Plan must be amended within 60 days of the changes.)	<u>X</u>	_____	_____
5. Has the facility submitted a closure plan to the RA at least 180 days before the date they expect to begin closure (265.112c)?	_____ <u>X</u>	_____	_____
(B) Time Allowed For Closure:			
1. Does the schedule for final closure allow for the following:			
a. Treatment, removal, or disposal of H.W. within 90 days after receipt of final volume of H.W. or after approval of closure plan (265.113a)?	<u>X</u>	_____	_____
b. Completion of closure plan activities within 180 days after receipt of final volume of H.W. or after approval of closure plan (265.113b)?	<u>X</u>	_____	_____

X. Use And Management Of Containers:
(Part 265 Subpart I)

	<u>Yes</u>	<u>No</u>	<u>Comments</u>
1. Does the facility transfer H.W. from containers not in good condition or leaking to containers in good condition (265.171)?	<u>X</u>	—	_____
2. Are containers compatible with H.W. stored in them (265.172)?	<u>X</u>	—	_____
3. Are containers stored closed (265.173a)?	<u>X</u>	—	_____
4. Are containers managed to prevent rupture or leakage (265.173b)?	<u>X</u>	—	_____
5. Are containers inspected weekly for leaks and deterioration (265.174)?	<u>X</u>	—	_____
6. Are ignitable or reactive wastes stored at least 50 feet from the facility's property line (265.176)?	<u>X</u>	—	_____
7. Are incompatible wastes stored in separate containers (265.177a)?	<u>X</u>	—	_____
8. Are H.W. not placed in unwashed containers that previously held an incompatible waste or material (265.177b)?	<u>X</u>	—	_____
9. Are containers holding a H.W. that is incompatible with any waste or materials stored nearby in other containers, piles, open tanks, or surface impoundments separated from the incompatibles by sufficient distance or protected by means of a dike, berm, wall, or other device (265.177c)?	<u>X</u>	—	_____
10. Are containers that are not empty managed as a H.W. (261.7a.2)?	<u>X</u>	—	_____
11. For a container to be considered empty the facility must ensure that:			
a. No more than one inch of residue remains on bottom of container or inner lining (261.7b.1)?	—	—	_____
b. Containers that held an acutely H.W. are tripled rinsed using a solvent capable of removing the contents (261.7b.3)?	—	—	_____

HEADQUARTERS 4392 AEROSPACE SUPPORT GROUP
Vandenberg Air Force Base, California
1 February 1985

WASTE ANALYSIS PLAN (40 CFR 264.13 (b) and (c))

The hazardous wastes to be stored at Space Launch Complex (SLC) 1E and described in this section are categorized into two groups. The first group (Group I) includes wastes in unopened, original, labeled manufacturers' containers plus paints and reagent grade chemicals in opened original containers. Group II includes all other wastes.

DoD has issued specific regulations (incorporated here by reference) which govern the transfer of hazardous wastes which are applicable to all generators of hazardous wastes. These regulations require that activities transferring hazardous wastes properly identify the transferred property so that the hazardous characteristics of the waste are immediately apparent to the receiving personnel. This translates into a requirement for actual generators to procure a waste analysis. Each different waste must be accompanied by a completed Disposal Turn-In Document (DD Form 1348-1, Figure 1) that includes a proper item identification. The DoD regulations state that proper identification of a hazardous waste identified by a National Stock Number (NSN), a unique 13 digit code assigned to each item in the Federal Supply System, will include the following:

- (i) the noun name as cataloged in the Federal Supply System,
- (ii) the chemical name of the hazardous contaminants and the noun name of nonhazardous contaminants.

Proper identification of hazardous waste without an NSN will include:

- (i) the chemical name of the hazardous components.
- (ii) the chemical names of hazardous contaminants and noun name of nonhazardous contaminants.

This information allows 4392 AEROSG/DEV personnel to use standard references in order to determine the chemical characteristics and proper storage procedures for the hazardous wastes. Additionally, many Group I waste containers will have the original manufacturer's label affixed. Often information supplied on the label can assist in determining hazardous characteristics and proper storage for the item.

For items with an NSN, 4392 AEROSG/DEV will then determine the hazardous characteristics by accessing DoD's Hazardous Materials Information System (HMIS). The HMIS is a computerized

source of information which can cross-reference many NSNs to their particular chemical characteristics such as flash point, specific gravity, special handling precautions, and the hazardous ingredients contained within the NSN item.

For other items, 4392 AEROSG/DEV personnel have the following references to determine the hazardous characteristics:

- (i) NFPA Book (Fire Protection Guide on Hazardous Materials).
- (ii) Chemical Dictionary.
- (iii) DoT Guide (Emergency Response Guide No. DoT P. 5800.2).
- (iv) NIOSH/OSHA: (1) Pocket Guide to Chemical Hazards:
(2) Occupational Health Guidelines for Chemical Hazards.
- (v) Industrial Chart for Toxic and Hazardous Chemicals in Industry.
- (vi) EPA Document: "A Method for Determining the Compatibility of Hazardous Wastes."

Figure 2 is an example of the data output obtained from the Hazardous Materials Information System for acetone. It provides an example of the detailed information which can be obtained through HMIS, without requiring a sample of the item to undergo laboratory analysis. The NSN for this item is 6810-00-184-4796, and it consists of 100 percent acetone. 4392 AEROSG/DEV can identify this compound as ignitable. The handling and storage information indicates that acetone should be stored in an area away from heat, sparks, and open flames, and separated from strong oxidizers, nitric/sulfuric acid mixtures, and chloroform. To fight fires involving this chemical, a type of dry chemical extinguisher should be used. Small spills can be removed with absorbent materials, while large spills should be contained and pumped into appropriate containers.

The above discussion of Group I waste items is intended to meet the requirements of paragraph 40 CFR 264.13(a)(2), which indicates that existing published or documented data on the hazardous waste may be used to meet the general waste analysis requirements.

4392 AEROSG/DEV personnel will inspect all waste shipments before transfer to the storage facility is authorized in order to assure proper identification by the generator. All shipments of Group I waste items will be visually inspected to determine whether the containers have previously been opened and whether they contain their original labels. If not previously opened, and if all samples contain their original labels, then the inspected

items and the remaining shipment lot will be accepted. If the shipment is paint in opened containers, each container will be visually inspected to ensure that no other wastes have been mixed with the paint. If there are no separated phases or settled solids in the paint or reagent grade chemicals then the items will be accepted as Group I wastes. All other wastes will be considered Group II wastes.

If there is an indication that generator analysis is incorrect, then a verification testing program will be initiated. Table 1 lists the analytical parameters of this program.

Parameters and Rationale (40 CFR 264.13 and 264.13(b)(5))

Generator's turn-in activities provide all information required by DoD's standard turn-in requirements. This information enables proper handling and storage of hazardous waste. Table 1 identifies parameters for analyzing the Group II wastes to verify identification and ensure proper storage.

Example of the Defense Turn-In Document
For Generators of Hazardous Materials and
Hazardous Wastes

1

Figure 2 (Continued)

Hazardous Materials Information

System Data for Acetone

MEM A14

6810-00-184-4794

ACT CD DATE PAGE NR
84052 2

***** HEALTH AND PHYSICAL PROPERTY DATA *****

BOIL. PT 133.1 VAP DEN/AIR=1/2.0 SOL IN H2O COMPLETE FLASH POINT -18C TCC(OFF) VAP PRESS/MM HG/70 F/18 T.V.-MIXTURE 1000 PPM STORAGE CODE 52

APPEARANCE AND ODOR COLORLESS, ECSTILE LIQUID, MILD ODOR LEL/PCY/ 2.4 UEL/PCY/ 12.8 SP GR 0.80 PCT VOLT BY VOL 100 EFF RATE PER REFERENCE 5.6, BUTYL ACETATE

EFFECTS OF OVEREXPOSURE IRRITATING TO THE EYES, DRYNESS & IRRITATION TO SKIN, SORE THROAT, HEADACHE, DIZZINESS, SLEEPINESS. NET PROP WT-AMMO KEV LB

STABLE CONDITIONS TO AVOID HEAT, SPARKS & OPEN FLAMES. MATERIALS TO AVOID STRONG OXIDIZERS, CONC. KMNO3 & SULFURIC ACID MIXTURES, CHCL3

HAZ POLYMERIZATION OCCUR NO CONDITIONS TO AVOID AUTO IGN TEMP VISCOSITY CB AMMO CD

HAZARDOUS DECOMPOSITION PRODUCTS CARBON MONOXIDE CAN FORM UPON INCOMPLETE COMBUSTION.

***** SAFETY STORAGE HANDLING AND FIRE FIGHTING PROCEDURES *****

EXTINGUISHING MEDIA DRY CHEMICAL, ALCOHOL FOAM, CO2, A-20 SPRAY OR FOG, HALONS, CO2 SPECIAL FIRE FIGHTING PROCEDURES USE HIGH APPROVED SELF-CONTAINED BREATHING APPARATUS.

UNUSUAL FIRE / EXPLOSION HAZARDS REACTION WITH CHLOROPFORM CAUSES FIRE & EXPLOSION, DIST. IGNITION POSSIBLE, VAPOR MAY FLASH BACK. PROTECTIVE GLOVES IMPERVIOUS

EMERGENCY FIRST AID PROCEDURES INHALATION: REMOVE VICTIM TO FRESH AIR. GIVE CPR IF NOT BREATHING. GET MEDICAL ATTENTION. SKIN: WASH WITH SOAP & WATER. REMOVE CONTAMINATED CLOTHING & DO NOT REUSE UNTIL THEY ARE DRY. INGESTION: GIVE LARGE AMOUNTS OF WATER, THEN INDUCE VOMITING. SEE DOCTOR.

TYPE OF RESPIRATORY PROTECTION USE HIGH APPROVED RESPIRATORY PROTECTION EQUIP TO STOP OVEREXPOSURE VENTILATION LOCAL EXHAUST IS PREFERRED

EYE PROTECTION SAFETY GOGGLES OTHER PROTECTIVE EQUIPMENT PROTECTIVE CLOTHING. HANDLING / STORAGE PRECAUTIONS PROTECT AGAINST PHYSICAL DAMAGE TO CONTAINERS. USE SPARK-RESISTANT ELECTRIC APPLIANCES. KEEP AWAY FROM OXIDIZING SUBSTANCES. KEEP AWAY FROM IGN. SOURCES.

***** SPILL AND LEAK PROCEDURES *****

SPILL AND LEAK CONTROL ELIMINATE ALL SOURCES OF IGNITION IMMEDIATELY & EVACUATE THE AREA. BE PREPARED FOR FIRE. WEAR APPROPRIATE PROTECTIVE CLOTHING & RESPIRATORY PROTECTION EQUIPMENT WHEN ENTERING SPILL AREA. SHUT OFF LIQ. VENTILATE, DIKE & PUMP INTO SALVAGE CANS. ABSORB IN SPLS

WASTE ELIMINATION DISPOSE IN ACC. TO FEDERAL & LOCAL REGULATIONS. HANDLE WASTE MATERIAL IN ACC. TO REQUIREMENTS. OR WHEN IN HIGH CONCENTRATION, SPRAY AS SUCH OR AFTER MIXING WITH A SOLVENT & BURN IN AN INCINERATOR. WHEN IN LOW CONC., TREAT W/ ACTIVATED SLUDGE IN PUBLIC AND PLT

OTHER PRECAUTIONS GROUND ALL CONTAINERS WHEN POURING OR TRANSFERRING LIQUID. STORE IN TIGHTLY CLOSED CONTAINERS IN A COOL, WELL VENTILATED AREA. DO NOT EAT OR DRINK IN STE AREA. USE GOOD PERSONAL HYGIENE. EMERGENCY & FIRST AID PROCEDURES (CONT): EYES: FLUSH EYES IMMEDIATELY WITH LARGE AMOUNTS OF WATER FOR AT LEAST 15 MINS. GET MEDICAL ATTENTION.

Figure 2
Hazardous Materials Information
System Data for Acetone

```

CLC014      013      * * * HAZARDOUS ITEM BASIC PUBLICATION * * *
N S N      FROM      HGR      P P IND      PM IND      PART NUMBER/TRADE NAME      ACT CD      DATE      PAGE NR
6810-00-184-1796      54527      CE      9      A      31125      87024      1

* * * * * GENERAL INFORMATION * * * * *

SOP/CTARY      MANUFACTURER      EMERGENCY TELE NO
AQ      SHELL OIL CO. (MICHEL & PELTON COMPANY)      713-473-9461

ITEM NAME      UI      US CONTAINER RTT      TYPE OF CONT      NET UNIT WT      MS./MILSAUE      EXEMPTION NO
ACETONE, TECHNICAL      CH      5 GAL      AEROSOL PROPELLANT      SPECIFICATION
                                O-A-51

RADIOACTIVITY      FORM      TR EP      HRC LIC NUMBER      CHEMICAL NAME      CHEMICAL FAMILY      FORMULA
                                DME, DIMETHYL KETONE      KETONE

* * * * * HAZARDOUS COMPONENTS * * * * *

HDSM NO      CHEMICAL NAME      PCT      T L V
AL3150000      ACETONE (C.A.S. NO. 67-64-1)      100      1000 PPM

* * * * * TRANSPORTATION DATA * * * * *

DOT SHIPPING NAME: ACETONE
CLASS: FLAMMABLE LIQUID      LABEL: FLAMMABLE LIQUID      HODES      ID NO: UN1090      RBT
WATER SHIPPING NAME: ACETONE
CLASS: FLAMMABLE LIQUID      LABEL: FLAMMABLE LIQUID      UN NO: 1090      UN CLASS: 3-1      COM 6PI      DOT: YES      IMCO: YES
TARIFF 6-D SHIPPING: N/A. REFER TO 49 CFR
CLASS:      LABEL:
ATA SHIPPING NAME: ACETONE
CLASS: FLAMMABLE LIQUID      LABEL: FLAMMABLE LIQUID      ATA ARTICLE NO: 1090
ATA 71-4 SHIPPING NAME: ACETONE
CLASS: FLAMMABLE LIQUID      LABEL: FLAMMABLE LIQUID      NHACI

* * * * * ADDITIONAL DATA * * * * *

```

TABLE 1

Analytical Parameters for all Group II
Waste Stored at SLC-1E

1. pH
2. Flash Point
3. Halides
4. Reactivity
 - a. Water
 - b. Cyanides
 - c. Sulfides
5. Physical Characteristics
 - a. Physical State
 - b. Color
 - c. Density

Test Methods (40 CFR 264.13 (b)(2))

The test methods* to be implemented to measure the parameters listed in Table 1 are summarized in Table 2. The physical characteristics outlined in Table 1 will be assessed by visual observation. Density will be tested through volume-to-weight ratios.

Sampling Methods (40 CFR 264.13 (b)(3) and 264.13 (c)(2))

The sampling methods which will be used for the Category II wastes are shown in Table 3.

Frequency of Analyses (40 CFR 264.13 (b)(4))

Verification testing begins after indications that the generator's identification is inaccurate. This testing will begin on the next turn-in by this generator and will continue until the generator's identification has proven to be accurate. Sampling will be done in accordance with the sampling schedule found in Table 4.

- * U. S. Environmental Protection Agency, Methods for Evaluating Solid Wastes, Physical/Chemical Methods. EPA Office of Waste and Waste Management, EPA Publication #SW-846, (1980).

TABLE 2

Test Methods to be Used to Measure the
Parameters Identified in Table 1

Parameter pH	Test Method Electrometric Methods 5.2, 5.3	References Test Methods for evaluating Solid Waste, Physical/ Chemical Methods, U. S. EPA SW-846, SW-846, First Edition
Flash Point	Pensky-Martens closed-cup tester	ASTM Standard D93-79 or D-93-80
Total Halides	Halogenated volatile organics, total prganic halides (TOX)	Test Methods for Evaluating Solid Waste, Physical/ Chemical Methods, U. S. EPA, SW-846, SW-846, First Edition
Reactivity	Water reactivity Cyanides Sulfides	EPA SW-846 Method 9010 EPA SW-846 Method 9030

TABLE 3

Sampling Methods for Waste
Stream Items Identified in Table 2

TYPE OF WASTE	GUIDE REFERENCE
1. Extremely viscous liquid	ASTM Standard D140-70
2. Crushed or powdered material	ASTM Standard D346-75
3. Soil or rock-like material	ASTM Standard D1452-69
4. Soil-like material	ASTM Standard D1452-65
5. Fly ash-like material	ASTM Standard D2234-76
6. Containerized liquid waste	"COLIWASA" described in "Test Methods for Evaluation of Solid Waste, Physical/ Chemical Methods, EPA, or "Samplers and Sampling Procedures for Hazardous Streams," EPA

TABLE 4

Number of Samples to Be collected as a Function
of the Number of Items in the Lot

SCHEDULE A

LOT SIZE	NUMBER OF SAMPLES TO BE TAKEN
2 to 8	2
9 to 15	3
16 to 25	5
26 to 50	8
51 to 90	13
91 to 150	20

Additional Requirements for Facilities Handling
Ignitables, Reactive, or Incompatible Waste
(40 CFR 264.13(b)(6) and 264.17)

No additional testing of ignitable, reactive, or incompatible hazardous waste is necessary because DoD turn-in requirements provides the necessary information to properly store ignitable and reactive wastes and prevent the mixing of incompatible wastes.

HEADQUARTERS 4392 AEROSPACE SUPPORT GROUP
UNITED STATES AIR FORCE
VANDENBERG AIR FORCE BASE, CALIFORNIA

OPERATIONS PLAN
236-84
VANDENBERG AIR FORCE BASE
TOXIC AND HAZARDOUS WASTE MANAGEMENT PLAN
30 June 1984

OPR: 4392 AEROSG/DEV

FOR OFFICIAL USE ONLY

4392 AEROSG OPLAN 236-84

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HEADQUARTERS 4392 AEROSPACE SUPPORT GROUP

United States Air Force

Vandenberg Air Force Base, California 93437

ADMINISTRATIVE AND SECURITY INSTRUCTIONS

1. TITLE.

This document is the 4392 Aerospace Support Group Toxic and Hazardous Waste Management Plan 236-84. The short title is VAFB OPLAN 236-84.

2. EFFECTIVE DATE.

This plan is effective upon receipt and supersedes VAFB OPLAN 236-83 dated 1 Apr 83

3. NICKNAME.

A nickname is not assigned to this plan.

4. OFFICE OF PRIMARY INTEREST.

The 4392 Civil Engineering Squadron, Environmental Planning Branch (4392 AEROSG/DEV), is the office of origin. Forward all recommendations for revision pertaining to this plan to this office for action. Project Officer is the Base Environmental Coordinator, extension 6-9687 or AV 276-9687.

5. SUPPORTING PLANS.

This plan was prepared in support of the management of hazardous waste activities on Vandenberg AFB. It provides originating activities with concepts, policy, and guidance on hazardous waste operations in support of AF and SAC directives. It remains the responsibility of the originating activities to insure that instructions and checklists are sufficient to accomplish the task for which they are responsible, and to insure they are periodically reviewed by personnel assigned to the activity and updated as required. Each HW originating agency or contractor will be required to develop and obtain approval of a HW management plan for those specific wastes associated with their operations. In addition, instructions, checklists, and other documents will require approval from the 4392 AEROSG/DEV. One draft copy of a HW management plan and supporting documents must be forwarded through the appropriate channels to 4392 AEROSG/DEV for approval within 60 days after this plan has been distributed. All new originating activities will have an approved HW management system in effect 60 days prior to initial operations.

6. CLASSIFICATION.

This plan is unclassified, FOR OFFICIAL USE ONLY.

7. SPECIAL HANDLING.

Special handling is not required.

8. AMENDMENTS.

Amendments will be published by page change or write-in instructions. Emergency change will be published in letter format. They will be forwarded to all recipients of the original plan.

9. DEFINITIONS AND ABBREVIATIONS. Definitions and abbreviations used herein conform to JSC Pub I and AFM 11-2 unless otherwise indicated.

a. Collection/Accumulation Point (CAP). A non-permitted storage/consolidation facility that provides a centralized facility for receiving, containerizing and storing hazardous waste. Storage of waste is limited to 90 days and the 90 day period starts with the initial usage of the container. All CAPs must be identified and registered with 4392 AEROSG/DEV.

b. Container. Any portable device in which a material is stored, transported, disposed of, or otherwise handled. Container must be DOT approved(Ref 49 CFR 178).

c. Contingency Plan. Means a document setting out an organized, planned and coordinated course of action to be followed in case of a fire, explosion, or release of hazardous waste or hazardous waste constituents which could threaten human health or the environment.

d. Dike. An embankment or ridge of either natural or man-made materials used to prevent the release of liquids, sludge, solids or other materials.

e. DHS. Department of Health Services.

f. DPDO. Defense Property Disposal Office.

g. DTID. Disposal Turn-In Document(DD Form 1348-1).

h. EPA. Environmental Protection Agency.

i. Generator. The EPA defined generator for VAFB is the 4392 AEROSG with EPA Permit No. CA9570025149.

j. Hazardous Waste(HW). Any waste material or mixture of wastes which is toxic, corrosive, flammable, reactive, an irritant, a strong sensitizer, or which generates pressure through decomposition, heat or other means. Such a waste or mixture of wastes may cause substantial injury, serious illness or harm to humans, domestic livestock or wildlife. Waste listed in 40 CFR(261) or CA Statue 22, Chapter 30, are by definition hazardous waste. Hazardous waste includes extremely hazardous waste.

k. Hazardous Waste Management. The systematic control of the collection, source separation, storage, transportation and disposal of hazardous waste.

l. Hazardous Waste Storage Facility (HWSF). The permitted storage facility on VAFB where all containerized waste generated on VAFB is brought for storage prior to final disposition by DPDO.

m. Incompatible Waste. A hazardous waste unsuitable for:

(1) Placement in a particular device because it may cause corrosion or decay of container materials (e.g., container inner liners or tank walls).

(2) Commingling with another waste or material under uncontrolled conditions because the commingling might produce heat or pressure, fire or explosion, violent reaction, toxic dusts, mists, fumes, gases, or flammable fumes or gases.

n. Manifest. A shipping document used to identify the concentration, composition, quantity, origin, routing and destruction of hazardous waste and which accompanies waste during its transportation from the point of origin to the point of storage and/or disposal. On-base manifest is the DTID, DD-Form 1348-1, which accompanies the waste during transport and storage on base. Off-base manifest is the California Uniform Hazardous Waste Manifest (DHS 8022A) which accompanies the waste during transport from VAFB to the disposal/treatment facility.

o. Origination Point. The facility or site where an act or process produces hazardous waste.

p. Originator. The individual, activity, or set of activities on Vandenberg AFB which generate or cause to be generated any waste materials designated hazardous by regulatory agencies.

q. Personnel. Means all persons who work at, or oversee the operations of a hazardous waste facility (CAP, Transportation, ect.).

r. PPM. Parts Per Million (Volume).

s. Representative Sample. Means a sample of the whole which can be expected to exhibit the average properties of the whole.

t. Transporter. Means a person engaged in the transportation of hazardous waste. 4392 LGT will transport waste on-base from the CAP to the HWSF. For off-base transportation, a hauler permitted by the State of California will be utilized.

u. TSDF. Treatment Storage Disposal Facility.

HEADQUARTERS 4392 AEROSPACE SUPPORT GROUP
Vandenberg Air Force Base, California
30 June 1984

4392 AEROSG OPLAN 236-84

CHARTS & MAP REFERENCES: DD Form 1348-1, California Uniform Hazardous Waste Manifest(DHS 8022A), EPA Hazardous Waste Label, PCB Inventory Sheet.

REFERENCES: This plan supports those requirements as outlined under the following regulations, instructions and OPLANS.

AFR 19-1, Protection and Enhancement of Environmental Quality

AFR 19-8, Environmental Protection Committee and Environmental Reporting

AFR 19-14, Management of Recoverable and Waste Liquid Petroleum Products

AFR 92-1, Fire Protection Program

AFP 19-5, Environmental Quality Control Book

HQ SAC Development of a Comprehensive Hazardous Waste Management Program, Instruction #3

VAFB OPLAN 234-81, Oil Spill Prevention Control and Countermeasure Plan (SPCC)

VAFB OPLAN 355-1, Base Disaster Preparedness Plan

VAFB OPLAN 370-83, Contaminated/Used Liquid Petroleum Product Recovery Plan

CESR 85-3, Hazardous Waste/Material (PCB)

Code of Federal Regulation (CFR), Title 40, Parts 110,112, 122, 124, 260 thru 265 CFR Title 49, Parts 101-195

Resource Conservation Recovery Act (RCRA), 42 USC 6901, et seq

California Health and Safety Code 25100, et seq

Title 22, California Administrative Code, Chapter 30, 60016, et seq

Defense Environmental Quality Program Policy Memorandum (DEQPPM 80-5, 8, 9)

TASK ORGANIZATIONS:

Base Environmental Protection Committee, Vandenberg Air Force Base, California

4392 AEROSG/DEV (Environmental Planning Branch), Vandenberg Air Force Base, California.

4392 AEROSG/LGT (Transportation Squadron), Vandenberg Air Force Base, California.

USAF HOSP/SGPB (Bioenvironmental Engineering Services), Vandenberg Air Force Base, California

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WSMC (Western Space and Missile Center), Vandenberg Air Force Base, California

SD/DEC (Space Division), Vandenberg Air Force Base, California

SATF (Shuttle Activation Task Force), Vandenberg Air Force Base, California

SA-ALC/SFTLE (Energy Management Laboratory), Vandenberg Air Force Base, California

DPDO/SYT (Defense Property Disposal Office), Vandenberg Air Force Base, California

4392 AEROSG//DEME/DEMH/DEMP/DEMM/DEMS (Civil Engineering Squadron), Vandenberg Air Force Base, California

4392 AEROSG/LGS (Supply Squadron), Vandenberg Air Force Base, California

394 ICBM Test Maintenance Squadron, Vandenberg Air Force Base, California

1369 Audiovisual Sq/DOC, Vandenberg Air Force Base, California

SPLDE-W (U.S. Army Corps of Engineers), Vandenberg Air Force Base, California

NASA (National Aero and Space Admin), Vandenberg Air Force Base, California

Det 41, Hq Ogden ALC, Vandenberg Air Force Base, California

1. GENERAL SITUATIONS. Vandenberg AFB currently generates over 50 tons of hazardous material/hazardous waste (HM/HW) per year. In order to ensure that the Air Force and its contractors handle and dispose of these wastes in a legal and environmentally sound manner, the following guidance is hereby established.

a. Friendly Forces:

(1) Environmental Protection Agency (EPA)

(2) State Department of Health Services, Waste Management Section

2. MISSION. This OPLAN was prepared in support of the management of hazardous waste activities on Vandenberg AFB. It provides originators with concepts, policy, and guidance on hazardous waste operations in support of AF and SAC directives.

3. TASKS FOR SUBORDINATE AND TENANTS UNITS:

a. The VAFB Environmental Protection Committee (EPC) will:

(1) Assess hazardous waste requirements and capabilities at the planning level and review operational plans and procedures for policy implementation.

(2) Assess requirements not previously identified in annual plans to insure policy is implemented.

(3) Act as an advisor to the emergency coordinator.

b. Environmental Planning (4392 AEROSG/DEV) will:

(1) Review and evaluate all contingency or emergency response events and provide guidance so as to effect a one time only occurrence.

(2) Obtain and maintain all necessary permits.

(3) Maintain a central file of all documents pertaining to hazardous waste management at VAFB. This includes plans, procedures, inventories, forecast and manifests.

(4) Coordinate all inspection activities.

(5) Provide means of disposal for waste that DPDO will not accept.

(6) Review all subordinate plans for the management of hazardous waste.

(7) Conduct audits on all CAPs and the permitted HWSF.

c. Western Space and Missile Center (WSMC) will:

(1) Appoint a single point of contact for the managing of hazardous waste for Space Division operations.

(2) Assure that proper files are maintained of all documents pertaining to hazardous waste management activities performed for AFSC. This includes: Hazardous Waste Management Plans, procedures, inventories, forecasts and manifests.

(3) Review and approve plans and procedures involving hazardous waste in AFSC or aerospace contractor activities.

(4) Assure compliance by all WSMC command organizations including contractors.

d. Bioenvironmental Engineering Services (USAF HOSP/SGPB) will:

(1) Provide stock numbers for appropriate sample containers.

(2) Provide guidance in accomplishing paperwork required for sample analysis.

(3) Provide guidance on sample collection.

e. The Energy Management Laboratory (SA-ALC/SFTLE) will:

(1) Obtain necessary equipment to support analytical requirements for the identification of HW originated on VAFB.

(2) Analyze representative samples turned in by the originators.

(3) Provide documented results of the analysis to 4392 AEROSG/DEV and to the originator of the hazardous waste.

e. Transportation Squadron (4392 AEROSG/LGT) will:

(1) Provide equipment and properly trained personnel to safely transport hazardous waste from originator to the Base HWSF.

(2) Insure the HW shipment from originator has adequate cargo constraints as outlined in Annex E, Appendix I.

(3) Schedule for general pickup on Thursdays and establish and implement an emergency pickup procedure.

g. Defense Property Disposal Office (DPDO/SYT) will:

(1) With the assistance of 4392 AEROSG/DEV, operate and manage the VAFB HWSF.

(2) Insure the timely recycling or disposal of hazardous waste from the Base HWSF and bulk storage tanks at CAP.

(3) Periodically review off-base disposal contractor to insure compliance with contractual and regulatory requirements.

(4) Provide copies of returned HW manifest to 4392 AEROSG/DEV.

h. All Hazardous Waste Originating Organizations will:

(1) Be responsible for all hazardous waste generated by their units or contractors under their control.

(2) Appoint a Point of Contact for all their hazardous waste activities on VAFB. This individual may be the CAP Manager.

4. GENERAL INSTRUCTIONS:

a. While this OPLAN is not to be construed as a contract directive, contracting officers will insure that this plan is implemented through appropriate contractual documents.

b. All attached Appendices to this OPLAN will be complied with by all originators on VAFB.

c. Hazardous waste will not be stored by originators for longer than 90 days at their respective CAP.

d. Waste stored at the base HWSF will not be stored longer than one year prior to disposal. The 90 day period at CAP will be included as part of the one year period.

e. Hazardous Waste will normally be picked-up on Thursdays except for emergencies.

5. LOGISTICS AND ADMINISTRATION: NORMAL.
6. COMMAND CONTROL AND OPERATIONAL REPORTS:
 - a. Command Control. Normal.
 - b. Command Control, Execution, and Operational Reports. Normal.
7. COMMUNICATIONS: Normal

EARL J. FARNEY, Colonel, USAF
Commander

ANNEX/OPR

A - Operations-Not Used

B - Maintenance-Not Used

C - Communications-Not Used

D - Hazardous Waste Collection/Accumulation Point Management,
4392 AEROSG/DEV

E - Turn-In-Procedures, DPDO/SYT

F - Emergency Procedures, 4392 AEROSG/DEV

OFFICIAL:


EARL J. FARNEY, Colonel, USAF
Commander

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CS	SPS/CC
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DO	SEM
XP	LG3B
SE	

4392 AEROSG

CC
DE/DES/DEE/DEF/DEM/DEV
OT
DW
PA
RM
LGS
LGSF
LGT

TENANT

SAMTO/CC
SATAF/CC
SD//DEC/LA
WSMC//CC/SE/PME
394 TMS/MBWE
DPDO/SYT
Det 30, 2WS
NASA/WLOD
1369 AVS/DOC
SA-ALC/SFTLE
SPLDE-W
6595 STG/CC
6595 ATG/CC
6595 MTG/CC

ANNEX "D"

4392 AEROSG OPLAN 236-84

HW COLLECTION/ACCUMULATION POINT MANAGEMENT

1. GENERAL.

a. This section provides the guidelines to which host and tenant agencies and their contractors, who do not have a State HW ID number, must comply with to effectively manage their hazardous waste at their origination points. Prior to the turn-in of the HW to the DPDO or DEV, originators will be ultimately responsible for the safe handling, consolidation(if performed), and storage of their HW. It is the responsibility of all organizations to appoint and identify their hazardous waste management personnel IAW their internal requirements and organization.

b. If an organization has several origination points and elects to consolidate the waste at a centralized location, they must assign a Collection/Accumulation Point (CAP) manager. The CAP will be responsible for the safe and effective operation of the Origination Points utilizing the CAP. The CAP manager will also develop the appropriate management plans, orders, procedures, personnel training and other documents as required to effectively manage the waste streams.

2. MINIMUM REQUIREMENTS TO ESTABLISH COLLECTION/ACCUMULATION POINTS.

a. IDENTIFICATION AND REGISTRATION. All HW Collection/Accumulation Points must be identified and registered with the 4392 AEROSG/DEV. Within 60 days from the date of this document, all HW originators must notify the 4392 AEROSG/DEV, in writing, of the facility number of their respective HW Collection/Accumulation Points and the proposed operations at their sites. All new originators will notify 4392 AEROSG/DEV, in writing, of their proposed HW Collection/Accumulation Point(s) and proposed operations at their sites at least 60 days prior to initial operations.

b. FACILITY DESIGN. The facility must be maintained and operated to minimize the possibility of fire, explosion or any unplanned release of HW to the environment (Ref 40 CFR 265.31). This performance standard can be met by the installation of an appropriate diking system in and around the facility, and the installation of sun and rain protective equipment (i.e. roofing system or individual drum covers). 4392 AEROSG/DEV is the approving authority for all facility designs and modifications. HW originators shall coordinate design activities with this office.

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c. SECURITY. The CAP manager must prevent unknowing entry, and minimize the possibility for the unauthorized entry, of persons or livestock onto the active portion of his facility (Ref 40 CFR 265.14).

d. FACILITY EQUIPMENT. The facilities must be equipped with the following equipment unless specified equipment is justifiably inappropriate for the waste generated/stored at the facility.

(1) Alarm system capable of producing emergency instruction (voice or signal) to facility personnel.

(2) A communications device, radio or telephone capable of summoning emergency assistance.

(3) Appropriate fire protection equipment suitable to the type of waste handled and stored at the site (Ref 40 CFR 265.32).

(4) Other equipment and supplies that facilitates the safe operation of the CAP (See Appendix VII, Annex "D").

e. TRAINING.

(1) All personnel having job assignments or responsibilities for the handling, transportation, storage or management of HW shall complete initial specialized training appropriate to their specific HW tasks within five months after the date of employment or assignment to a HW facility. An annual review of this initial training shall be conducted for these personnel. Job descriptions for these personnel are to be submitted to the 4392 AEROSG/DEV initially, on personnel changes or HW responsibility changes, and annually.

(2) Specific On-Base HW management training programs are currently being developed by the Host Base. An interim plan for this training has been documented, and some initial training has been accomplished. Personnel directly assigned to tasks involving the management of HW must attend standardized, general HW management courses for VAFB. Site specific HW management training will be accomplished via on-the-job training at the respective CAP or origination points. Further directives on the VAFB training programs will be provided as an amendment to this OPLAN as they are developed. Complete training records must be established, maintained, and submitted annually to the 4392 AEROSG/DEV by the originator.

f. CONTINGENCY PLAN. All Collection/Accumulation Points must have a concise one page contingency plan clearly outlining what actions to take in the event of any emergency at the site. The plan must be clearly posted at the site and all site personnel must be briefed on the plan's content. A copy of the plan must be filed with the 4392 AEROSG/DEV for review and distribution to Base emergency response organizations (Ref 40 CFR 265, Subpart D).

3. INSPECTION REQUIREMENTS.

a. The CAP manager must develop an inspection check list and schedule for HW handled on site. This check list and schedule shall be developed using the

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requirements of 40 CFR 265.15, California State Regulations, and any other applicable regulations. This check-list and schedule shall be used, properly documented, and kept at the facility. See Appendix VIII for a sample check-list and schedule developed to meet these requirements. This type of format is acceptable.

(2) Periodically the 4392 AEROSG/DEV will request that the CAP manager accompany him/her on unannounced inspections of CAP to insure compliance with this document. Inspections or visits to VAFB contractors will be coordinated thru the appropriate contracting officer or other appropriate Air Force representative.

4. ANALYTICAL SUPPORT FOR THE IDENTIFICATION OF HAZARDOUS WASTE.

a. All HW originators on VAFB shall manage their handling and consolidation practices such that the identification and quantity of waste placed in disposal containers is known. This should minimize the need for expensive analysis of unknown chemical mixtures. Arrangements for analysis of segregated waste will be made on a case-by-case basis by the USAF HOSP/SGPB only until the on-base AFLC Energy Management Laboratory Facility is capable of supplying the analytical support.

b. When directed by the Base Hazardous Waste Manager for purposes of quality control, originators will collect samples to be analyzed by an appropriate laboratory.

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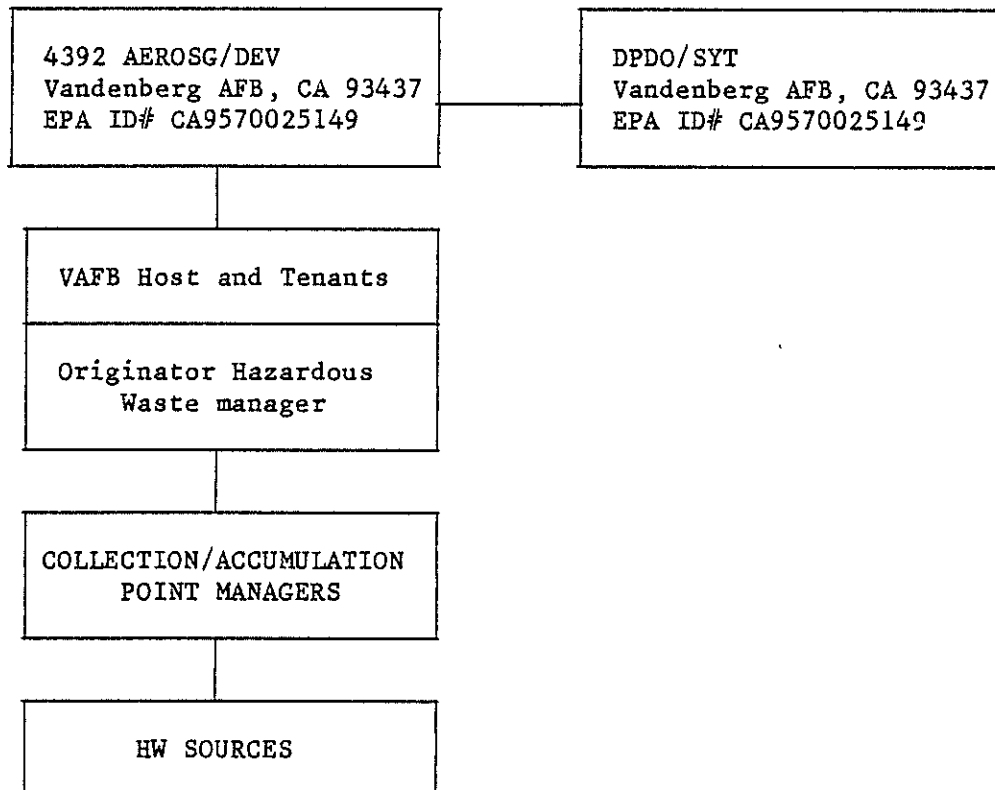
APPENDIX I

ANNEX "D"

4392 AEROSG OPLAN 236-84

HAZARDOUS WASTE MANAGEMENT ORGANIZATIONAL FLOW CHART

HAZARDOUS WASTE MANAGEMENT
ORGANIZATIONAL FLOW CHART



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APPENDIX II

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COLLECTION/ACCUMULATION POINT

1. The following sites have been identified as CAPs on Vandenberg AFB.

ORIGINATORS

CAPS (FACILITY #)

4392 AEROSG/LGS

6830 -

4392 AEROSG/DEMML

11352- *MECHANICAL, HEAT, REFRIG, TEST.*

~~394 ICBMTMS~~

~~1930, 1965~~

1369 AVS/DOC

9340 - *AUDIO VISUAL LAB*

SA-ALC/SFTLE

7417- *ENERGY MANAGEMENT LAB*

AFSC

MX
1800, 1820, 8401, - *MMC*
9325, SLC-4, V-23(SLC-6), -
and V-19(OMCF)

AIR FORCE SYSTEMS COMMAND

6523
8305
1785
8310
8430, 8431
9320, 904(TPQ-18)
1180

2. This list will be amended as CAPs are consolidated, added or deleted.

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APPENDIX III

ANNEX "D"

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IDENTIFICATION AND INVENTORY OF HAZARDOUS WASTE

1. The EPA waste categories listed in Atch 1, Appendix III, Annex "D" have been identified as being generated on Vandenberg AFB. Any originating activity that generates any hazardous waste other than those listed must immediately notify 4392 AEROSG/DEV in writing of the type and quantity of waste generated.
2. CAP managers will submit thru appropriate channels an annual forecast of HW quantities generated to 4392 AEROSG/DEV by 30 Nov of each year in accordance with Atch 2, Appendix III, Annex "D". 4392 AEROSG/DEV will consolidate all of the inputs to update the annual HW stream.

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ATTACHMENT 1

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HAZARDOUS WASTE GENERATED ON VAFB

<u>HAZARDOUS WASTE GENERATED ON VAFB</u>			
<u>*EPA WASTE NUMBER</u>	<u>CONTAMINANTS/SUBSTANCE</u>	<u>EPA WASTE NUMBER</u>	<u>CONTAMINANTS/SUBSTANCE</u>
D001	IGNITABLE	U019	BENZENE
D002	CORROSIVE	U045	CHLOROMETHANE
D006	CADMIUM	U075	DICHLORODIFLUROMETHANE
D007	CHROMIUM	U080	DICHLOROMETHANE (METHYLENE CHLORIDE)
D008	LEAD	U122	FORMALDEHYDE
D009	MERCURY SOLUTION	U133	HYDRAZINE
D010	SELENIUM	U140	ISOBUTYL ALCOHOL
D011	SILVER	U151	MERCURY
F001	HALOGENATED SOLVENTS	U154	METHANOL
F002	HALOGENATED SOLVENTS	U159	METHYL ETHYL KETONE
F003	NON-HALOGENATED SOLVENTS	U160	METHYL ETHYL KETONE, PEROXIDE
F004	CREOSOLS		
F005	NON-HALOGENATED SOLVENTS	U165	NAPHTHALENE
F011	CYANIDE SOLUTIONS	U174	N-NITROSODIETHYLAMINE

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HAZARDOUS WASTE
GENERATED ON VAFB(Continued)

<u>*EPA WASTE NUMBER</u>	<u>CONTAMINANTS/SUBSTANCE</u>	<u>EPA WASTE NUMBER</u>	<u>CONTAMINANTS/SUBSTANCE</u>
P030	CYANIDES	U188	PHENOLS
P064	ISOCYANATES	U208	1,1,1,2-TETRACHLOROETHANE
P068	HYDRAZINE, METHYL	U210	TETRACHLOROETHYLENE
P078	NITROGEN DIOXIDE	U220	TOLUENE
P080	NITROGEN TETROXIDE	U223	TOLUENE DIISOCYANATE
P082	N-NITROSODIMETHYLAMINE	U226	1,1,1-TRICHLOROETHANE
U002	ACETONE	U228	TRICHLOROETHYLENE, TRICHLOROETHENE
U012	ANILINES	U239	XYLENE

*A complete list of EPA HW numbers may be found in 40 CFR 261, Subpart D.

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ATTACHMENT 2

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ANNUAL INVENTORY FORM

CAP manager will submit an annual forecast of HW generated to 4392 AEROSG/DEV
by 30 Nov of each year in the following format:

ORIGINATOR: _____

CAP Manager: _____

FACILITY: _____

TELEPHONE #: _____

WASTE DESCRIPTION	LIQUID(L)/ SOLIDS(S)	QUANTITY	STORAGE
"1"	"2"	"3"	"4"

Item "1" - Insert proper DOT shipping name. EPA waste number should also be included.

Item "2" - Identify type of waste.

Item "3" - Indicate amount of waste generated per year. Examples: gal/yr, lbs/yr.

Item "4" - Bulk/Drum Storage

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APPENDIX IV

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HAZARDOUS WASTE CONTAINERS

1. Hazardous Waste originators are to retain container that the material came in as these are usually suitable for the disposal of similar waste. Specifications for HW containers are contained in 40 CFR 178.
2. Stock levels of DOT approved container and drum covers have been established at 4392 AEROSG/LGS (Base Supply).
3. Originators are instructed to obtain HW containers from Base Supply as needed. The stock currently in Base Supply is very limited. Therefore it is imperative that items are ordered using a demand code of "R" and an urgency justification of "AW". This will allow an automatic build-up of demand levels causing the proper amounts to be on hand in a very short period of time. Each originating agency should order their first three months requirements as soon as possible, and thereafter on a monthly basis.

TABLE I
HAZARDOUS WASTE CONTAINERS

<u>STOCK NUMBER</u>	<u>NOMENCLATURE</u>	<u>APPLICATION</u>
8110002929783	DRUM, 55 GAL, 18 GAUGE RIGID, STEEL, UNLINED, BUNG TOP	NON-CORROSIVE MATERIALS
8110000307780	DRUM, 55 GAL, 18 GAUGE RIGID STEEL, UNLINED, OPEN TOP	NON-CORROSIVE MATERIALS
8110P0948274610	DRUM, 15 GAL, 20 GAUGE RIGID STEEL, UNLINED, BUNG TOP	NON-CORROSIVE MATERIALS
8110P0948284610	DRUM, 55 GAL, 18 GAUGE RIGID STEEL, POLYLINE, BUNG TOP	CORROSIVE MATERIALS
8110P0948294610	DRUM, 15 GAL POLYETHYLENE, BUNG TOP	CORROSIVE MATERIALS
8110P0951004610	COVER, RUBBER, TO FIT BUNG TOP 55 GAL DRUM	ALL MATERIALS

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TABLE I
HAZARDOUS WASTE CONTAINERS(Continued)

<u>STOCK NUMBER</u>	<u>NOMECLATURE</u>	<u>APPLICATION</u>
8110P0951014610	COVER, RUBBER, TO FIT OPEN TOP 55 GAL DRUM	ALL MATERIALS
8110P0949834610	RECOVERY DRUM, 85 GAL	

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4392 AEROSG OPLAN 236-84

CONTAINER LABELING AND MARKING

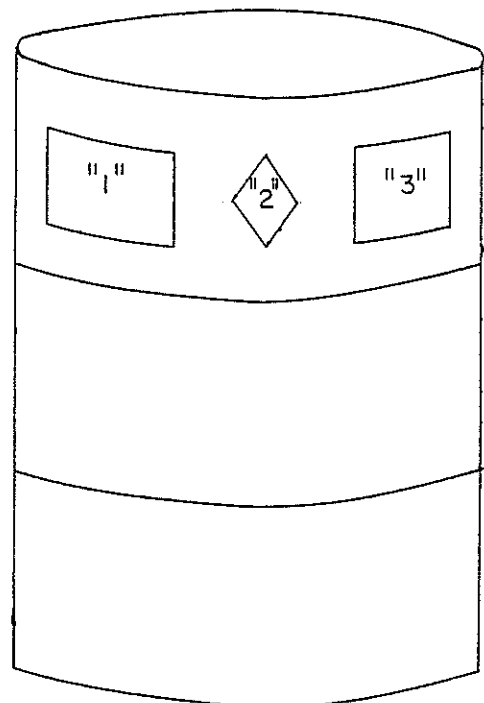
1. Hazardous waste containers must be properly labeled and marked prior to being accepted by the on-Base HW transportation agent and the base HWSF. The originators must apply all necessary markings and label(s). Originators should procure labels through normal supply channels.

2. Instructions for labeling and marking containers are as follows:

a. Item "1" - DD Form 1348-1 will be applied by DPDO/SYT.

b. Item "2" - Other labels as required by 49 CFR 172. (Examples: Corrosive, Flammable)

c. Item "3" - EPA Hazardous Waste Label (Atch 1, Appendix V, Annex "D") to be applied by the originator. This label must be applied when the first amount of waste is inserted into the container.



SIDE VIEW

APPENDIX V

ANNEX "D"

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EPA HAZARDOUS WASTE LABEL

(EXAMPLE)	
HAZARDOUS	
WASTE	
Federal Law Prohibits Improper Disposal If Found, Contact The Nearest Police, or Public Safety Authority, or The U.S. Environmental Protection Agency	
Proper D.O.T.	
Shipping Name	"1" UN or NA# "2"
GENERATOR INFORMATION	
Name	4392 AEROSG/DE (805) 866-9961
Address	"CAP Location and Originator Bldg #"
City	Vandenberg AFB State CA Zip 93437
EPA ID. NO.	CA9570025149 EPA Waste No. "4"
Accumulation Start Date	"3" Manifest Document No. "5"
HANDLE WITH CARE! Contains Hazardous or Toxic Chemicals (EXAMPLE)	

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1. Instructions for properly filling out the EPA Hazardous Waste label are as follows:

- a. Item "1" - Insert proper DOT shipping name (49 CFR 172).
- b. Item "2" - Insert proper UN or NA number (49 CFR 172).
- c. Item "3" - Insert accumulation start date, date when first amount of waste was inserted into the container.
- d. Item "4" - Insert proper EPA waste number (40 CFR 261) or applicable CA waste number if no EPA waste number available.
- e. Item "5" - To be filled in by DPDO/SYT.

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APPENDIX VI

ANNEX "D"

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REPORTS, PLANS, AND RECORDS

1. The following reports and plans must be prepared and submitted by the originating organization through the appropriate channels to the 4392 AEROSG/DEV.

a. Within 60 days from the date of this document:

- (1) HW Management and Contingency Plan
- (2) CAP Identification and Registration and CAP Manager Appointment

Letter

- (3) Training Records

b. Annually:

- (1) Annual forecast (Appendix III, Annex "A") by 30 Nov
- (2) Training Records by 30 Nov

c. As Required:

- (1) Incident report on spills/emergencies (within one week after incident)
- (2) Training Records
- (3) Change in CAP manager

d. 60 days prior to start-up of new generating site:

- (1) HW Management and Contingency Plan
- (2) CAP Identification and Registration
- (3) CAP Manager Appointment Letter and Training Records

2. Records: The following records must be retained by the originator for at least three years:

- (1) HW Disposal documents (DD Form 1348-1, DHS-8022A)
- (2) Training and Inspection Records

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APPENDIX VII

ANNEX "D"

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EQUIPMENT AND SUPPLIES

1. Recommended equipment and supplies that would facilitate the safe operations of a CAP are as follows:

- a. First Aid Kit
- b. Bung Wrench
- c. Heavy Duty, Polyethylene bags
- d. Broom, Push
- e. Broom, Shop
- f. Dust Pan
- g. Tool Box
- h. Shovels, D-Handle
- i. Absorbent, Chemical
- j. Labels
- k. Extra Drums, Overpack Drums
- l. Boots, Rubber
- m. Gloves
- n. Goggles, Unvented

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APPENDIX VIII

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WEEKLY INSPECTION CHECK LIST (CONTAINER STORAGE)

WEEKLY INSPECTION LOG

Facility: _____

Inspector: _____

Date: _____

ITEMS	FREQENCY	SAT	UNSAT	REMARKS
Inspection Log				
90 Day Storage Limit				
Warning Signs				
Spill Containment				
DOT Approved Containers				
Rain Protection				
Spill Cleanup Equip				
Fire Protection				
Container Labels				
Radiant Heat Protection				
Segregated Waste				
Outside Communication Capability				

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WEEKLY INSPECTION CHECK LIST (TANK STORAGE)

WEEKLY INSPECTION LOG

Facility: _____

Inspector: _____

Date: _____

ITEMS	FREQUENCY	SAT	UNSAT	REMARKS
Inspection Log				
90 Day Storage Limit				
Warning Signs				
Spill Containment				
Discharge Control Equipment	At least once each operating day			
Level of Waste in Tank	At least once each operating day			
Spill Cleanup Equip				
Fire Protection				
Data gathered from monitoring equipment	At least once each operating day			
Construction of Tank				
Construction of other materials surrounding the immediate area				
Outside Communication Capability				

APPENDIX IX

ANNEX "D"

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ANNEX "E"

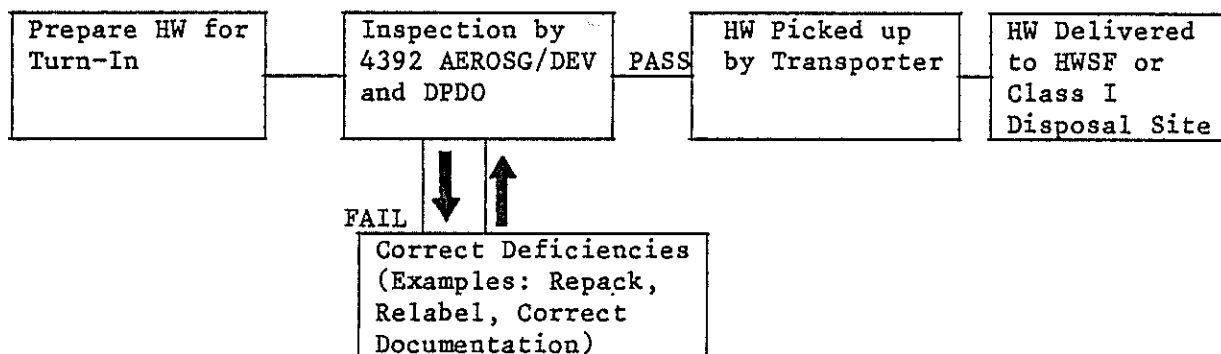
4392 AERSOG OPLAN 236-84

TURN-IN PROCEDURES

1. GENERAL: This annex outlines specific procedures that must be followed in order to turn-in hazardous waste from the originator to the Base HWSF/Off-Base Class I Disposal Site.

2. PROCEDURES

TURN-IN PROCEDURE FLOW CHART



a. To turn-in HW (except PCB waste) stored in containers, follow the procedures found in Appendix I, Annex "E".

b. To turn-in HW stored in bulk containers (DPDO Acceptable), follow the procedures found in Appendix II, Annex "E".

c. To turn-in HW stored in bulk containers (DPDO Non-Acceptable), follow the procedures found in Appendix III, Annex "E".

d. To turn-in PCB waste, follow the procedures found in Appendix IV, Annex "E".

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30 June 1984

APPENDIX I

ANNEX "E"

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CONTAINERIZED WASTE

1. The following events must take place in order to turn-in containerized HW from the CAP to the Base HWSF.
 - a. CAP manager contacts 4392 AEROSG/DEV by phone or letter indicating type and quantity of waste to be removed for disposal. The CAP manager must insure that the wastes are properly containerized, identified, labeled, palletized, and banded and that the DTID is complete as illustrated in Appendix V, Annex "E".
 - b. 4392 AEROSG/DEV and DPDO will inspect the wastes and associated documentation ensuring completeness. If wastes are ready for turn-in, DPDO representative will initial the lower left hand corner of the EPA HW label affixed to the drum.
 - c. CAP manager will schedule, at least one week in advance, transportation of waste with the 4392 AEROSG/LGT. 4392 AEROSG/LGT will pick up wastes only on Thursdays except for special situations. Once pickup schedule is determined, the CAP manager will notify 4392 AEROSG/DEV of date and time of transfer of waste to the Base HWSF.
 - d. Upon arrival at scheduled pickup point, 4392 AEROSG/LGT will inspect wastes to be picked up, ensuring that each drum has been initialed off by the DPDO representative. 4392 AEROSG/LGT will also insure that the information on the DTID is consistent with the actual amount of wastes being transported.
 - e. 4392 AEROSG/LGT will then sign and date DTID in block "CC," acknowledging receipt of the wastes. 4392 AEROSG/LGT will give copy number six of the DTID to the CAP manager.
 - f. 4392 AEROSG/LGT will then load the wastes onto their vehicle and secure them for transportation.
 - g. 4392 AEROSG/LGT will then transport the wastes directly to the Base HWSF. 4392 AEROSG/LGT shall not transport any wastes on any public highway except when crossing a public highway at right angles to gain access from South Vandenberg to North Vandenberg.
 - h. Upon arrival at the Base HWSF, 4392 AEROSG/LGT shall off-load the wastes to an area directed by the facility operator.
 - i. Once wastes are off-loaded and stored, DPDO representative shall sign and date the DTID acknowledging receipt of wastes.

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ANNEX "E"

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APPENDIX II

ANNEX "E"

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BULK WASTE (DPDO ACCEPTABLE)

1. The following events must take place in order to turn in waste stored in bulk from the originator to off-Base disposal site.

a. CAP manager contacts 4392 AEROSG/DEV by phone or letter indicating type and quantity of waste to be removed for disposal. The CAP manager will prepare a DTID (Appendix V, Annex "E") and assist DPDO in the preparation of a California Uniform Hazardous Waste Manifest, DHS-8022A (Atch 1, Appendix II, Annex "E"). The CAP manager will also provide any additional data as requested by 4392 AEROSG/DEV.

b. If sampling is required, the CAP manager will provide the necessary representative sample(s) to the 4392 AEROSG/DEV or the DPDO representative. USAF HOSP/SGPB will provide guidance on sample collection.

c. 4392 AEROSG/DEV and DPDO will inspect the wastes and associated documentation ensuring completeness.

d. When all necessary documentation has been completed, DPDO will schedule a pick-up with the disposal contractor.

e. The CAP manager and the DPDO representative shall be on site during pick-up. The DTID must be signed by the DPDO representative prior to loading. After the contractor has loaded the waste onto his vehicle, the DPDO/SYT representative will sign the California Uniform Hazardous Waste Manifest.

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ATTACHMENT 1

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CALIFORNIA UNIFORM HAZARDOUS WASTE MANIFEST (DHS-8022A)

1. DHS-8022A and DHS-8022B (Continuation Sheet) may be obtained thru DPDO.
2. Instructions for properly filling out the DHS-8022A (See next page) are as follows:
 - a. Item "1" - Insert the following:

4392 AEROSG/DEV ("Originator's Organization")
Vandenberg AFB, CA 93437
(805) 866-9687
 - b. Item "2" - Insert the following:

CA9570025149
 - c. Item "3" and "4" - Information required will be provided by DPDO.
 - d. Item "5" - Insert proper DOT shipping name and proper codes. See reverse side of form DHS-8022A for code listing.
 - e. Item "6" - Insert proper breakdown of waste, attach additional DHS-8022B as required.
 - f. Item "7" - To be signed by DPDO/SYT or 4392 AEROSG/DEV representative.
 - g. Item "8" - To be signed by the transporter.

ATTACHMENT 1

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ANNEX "E"

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Please print or type with ELITE type (12 characters per inch).

STATE ID NUMBER

83138865

"1"	GENERATOR NAME AND MAILING ADDRESS						MANIFEST DOCUMENT NUMBER									
	Vandenberg AFB						EPA ID NUMBER									
	4392 AEROSG/DEV															
	Vandenberg AFB, CA 93437															
	(805) 866-9687						"2"									
	AREA CODE/PHONE NUMBER						C A 9 5 7 0 0 2 5 1 4 9									
	TRANSPORTER NO. 1						VEH/CONTAINER NO									
	"3"															
	TRANSPORTER NO 2/ALTERNATE TSD FACILITY						VEH/CONTAINER NO									
							EPA ID NUMBER									
TREATMENT, STORAGE, OR DISPOSAL (TSD) FACILITY						EPA ID NUMBER										
"4"																
AREA CODE/PHONE NUMBER																
PROPER U.S. D.O.T. SHIPPING NAME AND HAZARD CLASS						UN/NA NUMBER		TOTAL QUANTITY		UNIT WT/VOL		CONTAINER NO. TYPE		WASTE CAT. NO.		
"5"																
COMPONENTS						CONC. RANGE UPPER		LOWER		UNITS %						
"6"																
SPECIAL HANDLING INSTRUCTIONS																
This is to certify that the above-named wastes are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable requirements of the Department of Transportation and the EPA.						MO.		DAY								
"7"																
Printed or typed full name and signature																
<input type="checkbox"/> Check if continuation sheet is used. Number of continuation sheets																
TO BE FILLED IN BY TRANSPORTER	TRANSPORTER 1 ACKNOWLEDGEMENT OF RECEIPT OF ABOVE WASTES						DATE REC'D & ACCEPTED		MO.		DAY					
	"8"															
	Printed or typed full name and signature															
	TRANSPORTER 2 ACKNOWLEDGEMENT OF RECEIPT OF ABOVE WASTES						DATE REC'D & ACCEPTED		MO.		DAY					
Printed or typed full name and signature																
TO BE FILLED IN BY TSDF	DISCREPANCY INDICATION SPACE															
	Facility owner or operator: Certification of receipt of hazardous waste covered by this manifest except as noted in the discrepancy indication space above. Note: TSDF must complete waste number See instructions.						EPA ID NUMBER		MO.		DAY					
	Printed or typed full name and signature															

APPENDIX III

ANNEX "E"

4392 AEROSG OPLAN 236-84

BULK WASTE (DPDO NON-ACCEPTABLE)

1. The following events must take place in order to facilitate the movement of DPDO non-acceptable waste from the originator to Off-Base disposal site.

a. CAP manager contacts 4392 AEROSG/DEV by phone or letter indicating type and quantity of waste to be removed for disposal. The CAP manager will prepare a DTID (Appendix V, Annex "E") and assist 4392 AEROSG/DEV in the preparation of a California Uniform Hazardous Waste Manifest, DHS-8022A (Atch 1, Appendix II, Annex "E"). The CAP manager will also provide any additional data as requested by 4392 AEROSG/DEV.

b. If sampling is required, the CAP manager will provide the representative necessary sample(s) to the DEV representative. USAF HOSP/SGPB will provide guidance on sample collection.

c. 4392 AEROSG/DEV will inspect the wastes and associated documentation ensuring completeness.

d. When all necessary documentation has been completed, 4392 AEROSG/DEV will schedule a pick-up with the disposal contractor.

e. The CAP manager and the DEV representative shall be on site during pick-up. The DTID must be signed by the 4392 AEROSG/DEV representative prior to loading. After the contractor has loaded the waste onto his vehicle, the 4392 AEROSG/DEV representative will sign the California Uniform Hazardous Waste Manifest.

APPENDIX III

ANNEX "E"

4392 AEROSG OPLAN 236-84

30 June 1984

APPENDIX IV

ANNEX "E"

4392 AEROSG OPLAN 236-84

PCB WASTE

1. All PCB wastes turned in by the 4392 Civil Engineering Squadron shall be done IAW CES Reg. 85-3. All other generating agencies shall conform to the procedures listed below.

2. The following events must take place in order to facilitate the turn-in of PCB waste from NON-CES generators to the DPDO.

a. CAP manager contacts 4392 AEROSG/DEV either by phone or letter indicating type and quantity of waste to be removed for disposal. The CAP manager must ensure that the wastes are properly containerized, identified, labeled, palletized and banded and that the DTID is completed as illustrated in Appendix V, Annex "E". The USAF HOSP/SGPB will collect the sample and arrange for the analysis of the sample for PCB waste.

b. 4392 AEROSG/DEV and DPDO will inspect the wastes and associated documentation ensuring completeness. If wastes are ready for turn-in, DPDO representative will initial the lower left hand corner of the EPA label affixed to the waste.

c. The CAP manager will schedule, at least one week in advance, transportation of waste with 4392 AEROSG/LGT. 4392 AEROSG/LGT will pick-up wastes only on Thursdays except for special situations. Once pick-up schedule is determined, the CAP manager will notify 4392 AEROSG/DEV of date and time of transfer to the Base HWSF.

d. Upon arrival at scheduled pickup point, 4392 AEROSG/LGT will inspect the waste to be picked up, ensuring that each item has been initialed off by the DPDO representative. 4392 AEROSG/LGT will also ensure that the information on the DTID is consistent with the actual amount of waste to be transported.

e. 4392 AEROSG/LGT will then sign and date the DTID in block "CC", acknowledging receipt of the waste. 4392 AEROSG/LGT will also give copy number six of the DTID to the CAP manager.

f. 4392 AEROSG/LGT will then load the wastes onto their vehicle and secure them for transportation.

g. 4392 AEROSG/LGT will then transport the waste directly to the Base HWSF. 4392 AEROSG/LGT shall not transport any waste on any public highway except when crossing a public highway at right angles to gain access from South Vandenberg to North Vandenberg.

APPENDIX IV

ANNEX "E"

4392 AEROSG OPLAN 236-84

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h. Upon arrival at the Base HWSF, 4392 AEROSG/LGT shall off-load the wastes to an area directed by the facility operator.

i. 4392 AEROSG/DEME will drain all unsealable PCB equipment. Oils will be drained into DOT approved 55 gal drums based on the following categories:

PCB CONCENTRATION

less than 7 PPM

7-500 PPM

over 500 PPM

j. Each category will have dedicated equipment to prevent cross-contamination of the PCB pumping equipment.

k. 4392 AEROSG/DEME will label, mark, palletize, band and complete a DTID (Appendix V, Annex "E") for the drum filled with PCB oil.

l. DPDO representative will sign and date the DTID acknowledging receipt of waste.

HEADQUARTERS 4392 AEROSPACE SUPPORT GROUP
Vandenberg Air Force Base, California
30 June 1984

ATTACHMENT 1

APPENDIX IV

ANNEX "E"

4392 AEROSG OPLAN 236-84

PCB INVENTORY SHEET

1. Instructions for properly filling out the PCB Inventory Sheet (See next page) are as follows:

- a. Items "A,B,C,D" - Self Explanatory
 - b. Column 2 - To be filled in by originating activity.
 - c. Column 3,4,5 - Self Explanatory
 - d. Column 6 - Give approximate dimensions of item. If items are placed in a container, give the dimensions and type of container. (Example: 5' x 5' x 5', wooden box).
 - e. Column 7 - Description of item. (Examples: Capacitor, Oils, Debris, ect.)
 - f. Column 8 - Only applicable to electrical equipment.
 - g. Column 9 - Insert serial number (If Applicable).
 - h. Column 10 - Insert manufacture (If Applicable).
2. This sheet must be attached to the DTID.

ATTACHMENT 1

APPENDIX IV

ANNEX "E"

4392 AEROSG OPLAN 236-84

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PCB INVENTORY SHEET

INSTRUCTIONS ON REVERSE SIDE

DPDO

GENERATOR "A"

POINT OF CONTACT

LOCATION OF MATERIAL "B"

COMMERCIAL PHONE

AUTOVON PHONE

INSTALLATION	"C"
--------------	-----

FACILITY	"D"
----------	-----

[illegible]

HEADQUARTERS 4392 AEROSPACE SUPPORT GROUP
Vandenberg Air Force Base, California
30 June 1984

APPENDIX V

ANNEX "E"

4392 AEROSG OPLAN 236-84

DISPOSAL TURN-IN DOCUMENT, DD FORM 1348-1 (6 PART)

1. Disposal Turn-In Document (DTID). A properly prepared DTID is required before any HW can be turned into the Base HWSF. The originator will prepare the DTID. The information required on the DTID shall be typed.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80																																																																																																																				
DOC IDENT		RI FROM		M & S		FSC		STOCK NUMBER		NIIN		ADD		UNIT OF ISSUE		QUANTITY		SERV		REQUISITIONER		DATE		SERIAL		SUFFIX		SUPPLEMENTARY ADDRESS		SIGNAL		FUND		DISTRIBUTION		PROJECT		PRIORITY		REC'D DEL DATE		ADVICE		RI		UNIT PRICE		DOLLARS		CTS.																																																																																																																																																	
"1"														"2"														"3"														"4"														"5"														"6"																																																																																																																													
SHIPPED FROM														SHIP TO														MARK FOR														PROJECT														TOTAL PRICE																																																																																																																																											
Originator's Name														DPDO/SYT SZ3189														HW														DMC A														"7"																																																																																																																																											
Address, Phone #														Vandenberg AFB, CA 93437																																																																																																																																																																																					
EPA ID. CA9570025149														EPA ID. CA9570025149																																																																																																																																																																																					
WAREHOUSE LOCATION														TYPE OF CARGO														UNIT PACK														UNIT WEIGHT														UNIT CUBE														UFC														NMFC														FREIGHT RATE														DOCUMENT DATE														MAT COND														QUANTITY																																																							
F														G														H														I														J														K														L														M														N														O														P														Q														R														S													
SUBSTITUTE DATA (ITEM ORIGINALLY REQUESTED)														FREIGHT CLASSIFICATION NOMENCLATURE																																																																																																																																																																																					
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SELECTED BY AND DATE														TYPE OF CONTAINER(S)														TOTAL WEIGHT														RECEIVED BY AND DATE														INSPECTED BY AND DATE																																																																																																																																											
SHIPPED BY AND DATE														"8"														"9"														7														8																																																																																																																																											
PACKED BY AND DATE														NO. OF CONTAINERS														TOTAL CUBE														WAREHOUSED BY AND DATE														WAREHOUSE LOCATION																																																																																																																																											
4														"10"														6														9														10																																																																																																																																											
REMARKS:														TRANSPORTER acknowledgement of receipt of above items.														CC														DD														EE																																																																																																																																											
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11														12																																																																																																																																																																																					
13 TRANSPORTATION CHARGEABLE TO														14 B/LADING, AWB, OR RECEIVER'S SIGNATURE (AND DATE)														15 RECEIVER'S DOCUMENT NUMBER																																																																																																																																																																							

DD FORM 1348-1
(6 PT)

1 MAR 74

DOD SINGLE LINE ITEM RELEASE/RECEIPT DOCUMENT

APPENDIX V

ANNEX "E"

4392 AEROSG OPLAN 236-84

30 June 1984

2. Instructions for properly filling out the DD Form 1348-1 are as follows:
 - a. Block "1" - Insert National Stock Number (NSN) of material.
 - b. Block "2" - Insert quantity of drums, boxes.
 - c. Block "3" - Insert number previously assigned through supply channels.
 - d. Block "4" - Julian date.
 - e. Block "5" - Indicate the number of 1348-1's turned in on date shown in Block "4".
 - f. Block "6" - Indicate known or estimated value per unit.
 - g. Block "7" - Total known or estimated value.
 - h. Block "8" - Indicate container, i.e. 55 gal, metal ; 10 gal, plastic.
 - i. Block "9" - Known or estimated total weight.
 - j. Block "10" - Same as block "2".
3. WASTE DESCRIPTION: HW description must include the following:
 - a. Chemical name of hazardous contaminants and noun name of non-hazardous contaminants.
 - b. Amount of hazardous and non-hazardous contaminants based on user's knowledge or testing of the item expressed in a range of content by percentage or PPM if applicable.
4. Examples of Acceptable Turn-In Waste description:
 - a. Methyl Ethyl Ketone 80-88% contaminated with 8-15% Toluene.
 - b. 1,1,1 Trichloroethane 99% contaminated with Chromium 100-1,000 PPM.
 - c. (6810-00-593-6593 Dichloromethane) contaminated with 20-30% Methyl Ethyl Ketone and 5-10% dirt.
5. Examples of Unacceptable Turn-IN Waste description:
 - a. Hazardous Waste Liquid, N.O.S.
 - b. Cleaning solvent contaminated with 1-99% Paint Thinner.
 - c. Black Magic contaminated with dirt.
6. Certification Statement in Block "FF" must be signed by the originator before waste will be accepted by the HW transporter and the Base HWSF.

HEADQUARTERS 4392 AEROSPACE SUPPORT GROUP
Vandenberg Air Force Base, California
30 June 1984

ANNEX "F"

4392 AEROSG OPLAN 236-84

EMERGENCY PROCEDURES

1. GENERAL. All CAP must have a consise one page Contingency Plan(CP) outlining what actions to take in case of a spill/emergency.
2. In the event of a spill/emergency, the CAP will notify:
 - a. Fire Department 911
 - b. Hospital (If Applicable) 911
 - c. Civil Engineering Service Call 6-1856
 - d. Law Enforcement Desk 911
3. The following information will be provided when contacting the above organization:
 - a. Location
 - b. Quantity and type of spill
 - c. Current Status
 - d. Injured Personnel
4. The Civil Engineering Service Call Desk Monitor will initiate the appropriate Response Plan. If required, 4392 AEROSG/DEV will notify the appropriate regulatory agencies.
5. Prior to the arrival of the VAFB On-scene Disaster Control Group, the CAP manager will initiate the following actions to the extent that is reasonably safe.
 - a. Evacuate all non-essential personnel
 - b. Contain spill as much as practical to prevent spreading
 - c. Obtain supplies from emergency supplies
 - d. Secure area from unauthorized entry
6. When the VAFB On-scene Disaster Control Group arrives, the CAP manager will provide the following information to the On-scene Commander:

ANNEX "F"

4392 AEROSG OPLAN 236-84
30 June 1984

- a. Provide an assessment of problem to the On-Scene Commander.
 - b. Provide an inventory of all HW stored at the facility.
 - c. Provide a plot plan of the facility.
 - d. Provide procedures for clean-up that may be required for unique wastes.
7. The CAP manager will also have to document the event including all actions and results. This report shall be sent thru appropriate channels to 4392 AEROSG/DEV within one week of the event. The CAP manager will also replace those items used in the Emergency Supplies that were consumed.
8. CLEAN-UP. The emergency response team will collect all materials, containerize them, and the CAP manager will turn-in the waste IAW this OPLAN.

INSPECTION LOG

FACILITY

DATE

FACILITY	WEEKLY (W)/ DAILY (D)	SAT	UNSAT	PROBLEMS FOUND	CORRECTIVE ACTION TAKEN
OF DOORS	D				
SECURITY OF WINDOWS	D				
SECURITY OF GATES	D				
SECURITY OF FENCE/ WARNING SIGNS	D				
EVIDENCE OF LEAKS	D				
EVIDENCE OF TAMPERING	D				
EVIDENCE OF DAMAGE	D				
TEMPERATURE CONTROL	D				
DRAINAGE CONTROL	D				
WATER PRESSURE/VOLUME	D				
"NO SMOKING" SIGNS	D				
OTHER					
OTHER					
EQUIPMENT AND SUPPLIES					
FIRE EXTINGUISHERS	W				
EYE WASH OPERATIONS	W				
ABSORBENT AVAILABLE	W				
EMERGENCY CLOTHING AVAILABLE	W				
EYE SHIELDS AVAILABLE	W				
RUBBER GLOVES AVAILABLE	W				
SPILL APRONS MD-2	W				
MATERIAL					
LEAKS/SPILLS	W				
ODOR/FUMES	W				
EVIDENCE OF TAMPERING/ DAMAGE	W				
INSPECTOR'S NAME				SIGNATURE	

HEADQUARTERS 4392 AEROSPACE SUPPORT GROUP
Vandenberg Air Force Base, California
1 February 1985

CONTINGENCY PLAN FOR FACILITY 1635

1. Purpose:

The purpose of this contingency plan is to provide detailed instructions for facility and emergency response personnel to follow in order to minimize hazards and risks to human health or the environment resulting from fires, explosions, or any sudden or non-sudden release or discharge of hazardous waste(s) at or from the facility to the air, soil, or water. The procedures are also to be used as guidance in the event of a spill or other emergency involving hazardous waste(s) elsewhere at Vandenberg AFB. A summary sheet provides guidance for facility-personnel response.

2. Activation of the Contingency Plan:

Actions specified in this contingency plan shall be initiated and carried to completion immediately upon the occurrence or detection of a fire, explosion, or any release or discharge of hazardous waste(s) which could threaten human health or the environment.

3. Exercising the Plan:

This contingency plan shall be exercised not less than annually by those with contingency plan responsibilities.

4. On-Scene Coordinator:

a. The on-scene coordinator (OSC) for this contingency plan shall be the Base Commander. The OSC function shall be performed by an alternate if the primary OSC so designates or is not available.

b. The following identifies the OSC and, by ranking, his alternates:

		Phone No.	Bldg No.
OSC	Base Commander	6-4602	11777
1st Alternate	Deputy Base Commander	6-4603	11777
2nd Alternate	Base Civil Engineer	6-6855	11442
3rd Alternate	Deputy Civil Engineer	6-6855	11442
4th Alternate	Fire Chief	6-3111	13016
5th Alternate	Chief, DEM	6-5891	11442

This list shall be updated as required to be current and appropriate notifications made as appropriate.

5. On-Base Distribution of the Plan:

A copy of the most current plan shall be maintained at

Facility 1635. In addition, a one page summary sheet identifying critical actions shall be posted at each entrance to the facility, along with a map of the facility indicating evacuation routes and the layout of storage at the facility. Complete copies of the up-to-date plan shall be provided to, and maintained by, the following offices:

Telephone Numbers

1 STRAD/SE	6-1842
1 STRAD/PA	6-3891
USAF Hosp/SG	6-6726
USAF Hosp/SGPB	6-7811
4392 AEROSG/CC	6-4602
4392 AEROSG/RM	6-8752
4392 AEROSG/LGT	6-5747
4392 AEROSG/LGC	6-5001
4392 AEROSG/DE	6-6855
4392 AEROSG/DEF	6-3111
4392 AEROSG/DEE	6-5372
4392 AEROSG/DEV	6-0740
4392 AEROSG/DEM	6-2691
4392 AEROSG/SP	6-4230
4392 AEROSG/DW	6-4021
SAMTO/CC	6-6071
SATAF/CC	6-3862
WSMC/CC	6-4976

6. Off-Base Distribution of the Plan. Distribution of the plan shall be made to the following off-base organizations:

- a. California Department of Health Services
- b. California Emergency Response Team

7. Amendment of the Plan. This contingency plan shall be reviewed not less than annually. In addition, the plan shall be amended promptly and notice of any changes distributed if:

- a. Applicable regulations are revised and result in a requirement for changes in this plan.
- b. The plan fails in an emergency or is found to be faulty when exercised.
- c. Information on OSCs changes.
- d. The emergency equipment list changes.

8. Non-Emergency Duties of the OSC:

- a. The OSC shall be on call, to respond to an emergency condition within a short period of time at all times. The OSC shall coordinate all emergency response measures, calling upon and placing into service any Base or outside assistance, resources or

expertise required to minimize adverse impacts of any emergency on human health or the environment. The OSC shall be familiar with all aspects of this contingency plan, all operations and activities conducted at the facility, the location and characteristics of wastes handled at the facility, the location of records within the facility, and the facility layout.

b. The OSC shall have the authority to commit the resources needed to carry out the contingency plan.

9. Relationship to Other Emergency Plans:

Inasmuch as other plans may be activated during an emergency, this contingency plan shall be used conjointly with such other plans. In the event of a conflict between provisions of two or more plans, the more stringent provisions or those more consistent with applicable laws and regulations, shall be followed, to the extent that such can be determined to be the case during the course of the emergency.

10. OSC Support:

All base organizational units shall be made available to support OSC response to an emergency. Assistance from the following organizations is anticipated to be essential:

Base Civil Engineer	(Service Desk 6-1856)
USAF Hospital Bioenvironmental	
Engineering Service	(6-7811)
Fire Department	(911)

11. Duties of Personnel Discovering Emergency Conditions:

a. Personnel discovering, detecting, or observing a fire, explosion, release, or situation with potential for such events at the facility shall immediately carry out the following actions, generally in the order given:

(1) Activate facility alarms or otherwise warn others at the facility of the emergency.

(2) Make observations, as possible, on the amount and type of material involved, the nature and extent of the problem, and other pertinent facts that may assist the OSC in initial response.

(3) Report incident to supervisor and/or the Base Civil Engineer or Command Post and Fire Department. The Base Civil Engineer is located in Building 11442, duty hours 0730-1600, telephone 6-6855, or he can be contacted through Service Call, Building 11439, telephone 6-1856 or the Command Post, Building 10512, telephone 6-9961. Fire department telephone is 911. Report to the Base Civil Engineer is mandatory.

(4) To the degree possible, include the following information in the report:

(a) Name and present location of person reporting the spill.

(b) Site of spill

(c) Injuries

(d) Materials and quantity involved

(e) Current status

(5) Consistent with personal safety and to the extent possible, take actions to contain or control the problem. Actions taken may include:

(a) Don appropriate protective clothing.

(b) Take appropriate actions to rescue or comfort injured personnel.

(c) Prevent further leakage by repositioning containers.

(d) Prevent a spill from spreading by trenching or the use of sand, absorbent materials, or soil if the material is liquid, or by covering the dry material with a polyethylene or other tarpaulin to prevent wind dispersion. Always work from the upwind side of the spill.

(6) Report to the OSC upon his arrival if possible.

12. Duties of the OSC During an Emergency Condition:

a. The following response actions shall be taken, in approximately the order given, to the extent consistent with the safety of all responding personnel:

(1) Assess the nature of the emergency by identifying the character, source, quantity, areal extent, and hazards of materials involved in the incident. Include explosion potential, toxicity, availability of appropriate protective equipment, potential for reactions that may produce toxic gases, etc. Methods may include examination of facility records, direct observation, or chemical analysis.

(2) Assess the potential for hazard to human health and the environment considering direct and indirect effects of the incident, such as the effects of any toxic, irritating, or asphyxiating gases that may be produced and the effects of any hazardous surface water run-offs from water or chemical agents used to control fire or heat induced explosion.

(3) Initiate rescue actions after measures have been taken to minimize risk of injuries to responding personnel. Initiate evacuation measures, if indicated and not already completed.

(4) If the incident is adjudged to be "reportable" by the OSC, he shall immediately notify the National Response Center (24 hour number, 800-424-8802) and give the following information:

(a) Name and telephone number

(b) Name and address of facility

(c) Time and type of incident

(d) Name and quantity of material(s) involved, to the extent possible.

(e) The extent of injuries, if any

(f) The possible hazards to human health or the environment beyond the bounds of the facility. In assessing reportability, the OSC shall use as a standard the threat to human health or the environment outside facility 1635 site boundaries.

(5) If it is determined that evacuation of local areas may be advisable, notify appropriate local authorities and advise them of the nature of the threat and the area likely to be affected.

(6) Take all reasonable measures necessary to bring an emergency to conclusion and ensure that fires, explosions, and releases do not occur, recur, or spread to other hazardous wastes or to the environment. Such measures may include, but not be limited to, stopping operations, collecting and containing released waste, and removing or isolating containers.

(7) Coordinate and facilitate sampling and monitoring for leaks; pressure buildup; gas generation, ruptures of containers, valves pipes, etc.; harmful personnel exposures; and other developments that could adversely affect members of the response team, facility personnel, other people in the area, or the environment.

(8) Ensure that follow-on actions are initiated and carried out in a prompt, safe, and effective manner to clean up, treat, store, and dispose of recovered waste(s); contaminated soils, water, absorbents, and other materials; or any other hazardous wastes produced as a result of the incident or response to it.

(9) In the affected areas of the facility, ensure that

no waste(s) incompatible with the released material is treated, stored, or disposed of at the facility until clean up procedures are complete. In addition, all emergency equipment on the facility inventory shall be cleaned and fit for its intended use and restored to stock levels before operations are resumed. Also before operations may be resumed, the California Department of Health Services, and any required local authorities, shall be notified that the conditions of this paragraph have been met.

(10) Note in the operating record the time, date, and details of any incident requiring activation of the contingency plan.

(11) Notify the California Department of Health Services in writing of the incident within 30 days. The report shall include at a minimum:

(a) Name, address and telephone number of the owner/operator.

(b) Name, address, and telephone number of the facility.

(c) Date, time, and type of incident.

(d) Name and quantity of material(s) involved.

(e) The extent of injuries, if any.

(f) An assessment of actual or potential hazards to human health or the environment, where applicable.

(g) Estimated quantity and disposition of recovered material that resulted from the incident.

13. List of Emergency Equipment. The following is a list of emergency equipment maintained at this facility:

- a. Spill absorbent
- b. First aid kit
- c. Shovel and dust pan.
- d. Overpack drums
- e. Bio-Pak air mask
- f. Goggles
- g. Coveralls
- h. Heavy duty polyethylene bags

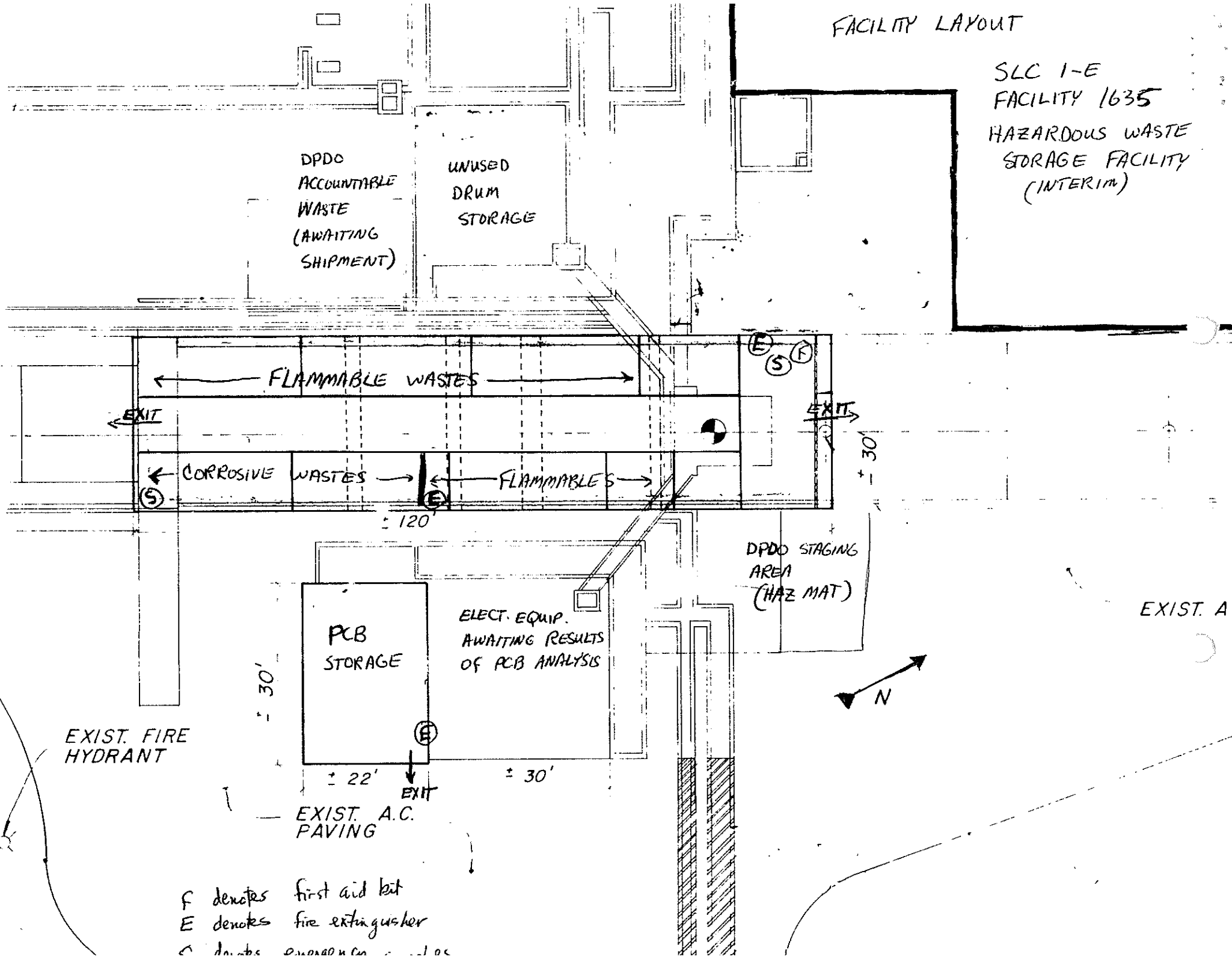
- i. Push broom
- j. Labels
- k. Rubber boots
- l. Bung wrench
- m. Gloves
- n. Fire extinguishers

14. Evacuation Procedures:

In case of an emergency condition, verbal or alarm signals shall be initiated to notify personnel at the facility. All personnel will then proceed to the nearest available exit and then upwind away from the facility.

FACILITY LAYOUT

SLC 1-E
FACILITY 1635
HAZARDOUS WASTE
STORAGE FACILITY
(INTERIM)



F denotes first aid kit
E denotes fire extinguisher
C denotes emergency contact

HEADQUARTERS 4392 AEROSPACE SUPPORT GROUP
Vandenberg Air Force Base, California
1 February 1985

Closure Plan for Facility 1635

INTRODUCTION:

Facility 1635, also known as Space Launch Complex 1 East (SLC-1E), is operated as a storage site for hazardous wastes generated at Vandenberg Air Force Base. Storage at the facility has been authorized by the California Department of Health Services and is conducted in accordance with Interim Status Document CA 9570025149, which has an effective date of December 18, 1981. Hazardous wastes generated on the base may be stored at this facility for a period not to exceed one (1) year without written approval from the Department of Health Services. Currently there are provisions for storage of hazardous wastes in containers only. This facility does not meet the more stringent requirements for Part B permitting, and a new facility meeting those requirements is being constructed. Once construction of the new facility is complete and the necessary permits have been obtained SLC-1E will be closed to the storage of hazardous waste and restored to its former condition. This closure plan has been prepared pursuant to requirements of Title 22, California Administrative Code.

COPIES OF THE PLAN:

One copy of this closure plan shall be kept at SLC-1E. One copy shall be kept by the Environmental Planning Branch of the 4392 Civil Engineering Squadron and one copy shall be kept by the Defense Property Disposal Office.

SCHEDULE FOR FINAL CLOSURE:

Final closure of the facility is anticipated to occur on the following schedule:

30 Sep 1985	Last receipt of hazardous waste.
1 Oct 1985	Activation of closure plan.
2-9 Oct 1985	Inventorying and other actions preparatory to field activities.
10 Oct 1985	Initiation of field activities to remove all stored containerized wastes from Vandenberg Air Force Base or to the new permitted facility.
31 Oct 1985	Completion of all containerized hazardous waste removal/transfer activities.

- 1 Nov 1985 Inspection of facility and equipment for potential contamination.
- 2-8 Nov 1985 Collection of samples taken from suspect areas to nature and extent of contamination, if any. Includes soil cores as appropriate.
- 29 Nov 1985 Analyses of samples complete.
- 2 Dec 1985 Formulation and initiation of decontamination plan of action, if required. May include requirement to do more sampling to establish extent of environmental contamination.
- 31 Jan 1986 Completion of facility decontamination. Initiation of action to remove/contain environmental contamination, if any.
- 31 Mar 1986 Completion of all closure actions, including certification of closure. If additional time is required to complete closure, appropriate notifications will be completed.

DESCRIPTION OF ACTIONS TO BE TAKEN DURING CLOSURE:

TRANSFER OF CONTAINERIZED WASTES (10-31 OCTOBER 1985).

Trained individuals will inspect the condition of, and documentation for, each container of hazardous waste located at the facility. Those containers that are sound and meet all other requirements for labelling, documentation, and identification of wastes, will be approved for transfer from the facility. Transfer will entail either removal from the base by a licensed hazardous waste hauler to a permitted treatment, storage or disposal (TSD) facility, or transfer by trained base personnel to the newly constructed, conforming-storage facility on base. Forklifts, trucks, and other equipment will be used as required to accomplish safe loading and transfer. A record of the transfer will be created and documentation prepared as required.

Containers that do not meet the requirements for transfer will be subject to follow-on actions to allow removal to be accomplished. In the event wastes are inadequately identified, sampling and a waste analysis will be accomplished using appropriate procedures to ensure personnel and environmental safety. In the event the container is unsound, the waste will either be transferred to another container or be otherwise packaged by trained individuals following approved procedures. After analysis and/or re-packaging, another inspection of these wastes will be undertaken before transfer is approved and carried

out.

Only the types and quantities of hazardous wastes permitted at the new facility shall be moved to that facility; all other wastes will be removed to other licensed locations by appropriate means and with the necessary manifesting.

To the maximum practical extent, containerized wastes will be removed from Vandenberg Air Force Base during this period.

EQUIPMENT FOR TRANSFER OF WASTES: Hand tools, forklifts, safety equipment, trucks, spill response equipment, and other necessities for the safe removal of wastes will be identified and brought on site, if not already present, before each day's activities. Safety equipment includes gloves and other protective equipment. Spill response equipment includes absorbent materials and overpack drums. Personnel operating the equipment, or standing by for spill response, will be trained in their functions as well as handling spills of hazardous waste and emergency response procedures. The Fire Department and Security Police will be put on standby. Operations will be overseen by personnel from the Environmental Planning Branch (DEV) and the Bioenvironmental Engineering Section of USAF Hospital (SGPB).

INSPECTION OF FACILITY 1635 AFTER CLOSURE: After containerized wastes have been removed from Facility 1635, a detailed and complete inspection of the facility and any equipment will be conducted by personnel from DEV and SGPB. At any location where spills or other contamination is in evidence, samples will be collected and the method, probable identity, and site of sampling documented. While awaiting the results of analysis, all reasonable actions will be taken to control/contain the material. After an analysis of those samples, and based upon the results, a plan of action will be devised and implemented to thoroughly and safely remove any hazardous waste residues, contaminated soils, or other contaminated materials. Any hazardous residues will be decontaminated or disposed of in accordance with applicable regulations and established procedures.

ENVIRONMENTAL CONTAMINATION: In the event contamination is observed at the site and follow-on work indicates a potential for contamination to have entered the environment, affirmative actions will be devised and implemented to confirm or reject the possibility. This work may include, but not be limited to, the collection and analysis of soil cores, unsaturated (vadose) zone water, and/or groundwater samples in adequate number and from such locations as to reasonably establish whether environment contamination has occurred. Based upon the findings of this work, follow-on activities will be devised and implemented to safely and

thoroughly remove or treat in place any environmental contamination. This work will be supervised by SGPB.

STEPS NECESSARY TO CLOSE THE FACILITY COMPLETELY AT ANY TIME:

The steps identified under the schedule for final closure as expanded upon above constitute the required procedure to close the facility at any time other than final closure. Those steps are:

- Cease receiving waste and activate closure plan.
- Inventory and initiate contracts or other actions to carry on subsequent field operations.
- Initiate field activities to remove hazardous wastes present.
- Conduct inspections of the facility and any equipment for contamination. Sampling as required.
- Devise and implement decontamination activities and/or follow-on disposal activities.
- Conduct inspections of the environment for evidence of contamination and initiate clean up actions if needed.
- Certify closure.

Upon completion of these steps, no further maintenance of this facility, related to its use as a storage facility for hazardous waste, will be required. Upon completion of these closure actions, protection of human health and the environment will be ensured since there will be no hazardous materials or wastes present to escape, be released, leach, contaminate runoff or runoff, or to otherwise represent a contamination threat.

ESTIMATE OF MAXIMUM AND AVERAGE DAILY INVENTORY DURING THE LIFE OF THE FACILITY

Maximum stored volumes of the several types of hazardous waste stored at the facility during its lifetime are estimated below:

Type of Waste	Instantaneous Maximum Inventory of Wastes
D001 Ignitable	11,000 gal
D002 Corrosive	1,375 gal
D006 Cadmium	2,500 gal
D007 Chromium	275 gal
D008 Lead	100 gal
D009 Mercury Solution	100 gal
D010 Selenium	100 gal
D011 Silver	200 gal

F001	Halogenated Solvents, Degreasing Oprs	5,500 gal
F002	Halogenated Solvents, Still Bottoms	2,750 gal
F003	Non-Halogenated Solvents	550 gal
F004	Non-Halogenated Solvents (Cresols)	500 gal
F005	Non-Halogenated Solvents	500 gal
F011	Cyanide Solutions	200 gal

STEPS REQUIRED TO DECONTAMINATE FACILITY EQUIPMENT DURING CLOSURE:

As a storage facility for containerized wastes, the extent of, and requirement for, decontamination capability is minimal except in the event of a spill or accident. Disposable equipment will not be decontaminated, but rather will be disposed of in an appropriate manner. Used absorbent materials, ruptured containers, and other contaminated materials will also be disposed of and not decontaminated.

Equipment such as trucks, forklifts, shovels, banding equipment and so forth will be decontaminated at a designated wash rack equipped with an oil/water separator, if it is safe to transport the item(s) contaminated to that facility. The cleaning medium will normally be water supplemented, if necessary, with a surfactant or other cleaning aid capable of removing the contaminating substance. In the event of gross contamination of the equipment, or if the waste is an extremely hazardous substance, the wash water will be collected, sampled, analyzed and disposed of accordingly. The equipment will be subjected to three wash cycles after which time it will be inspected to ensure that all contamination has been removed.

SUPERVISION OF CLOSURE:

Supervision of closure will be provided by the Base Civil Engineer, or his designee. Assistance will be provided by SGPB, DEV, Safety, Transportation, Contracting, the Fire Department, Security Police, and others as required.

NOTIFICATION OF CLOSURE:

Notification of the intent to close this facility will be provided to the California Regional Waste Quality Control Board and/or other appropriate agencies at least 180 days before closure is begun. A copy of this closure plan will accompany that notification.

AMENDING THE CLOSURE PLAN:

This closure plan will be amended to reflect any changes in the plan, facility operations, or circumstances warranting such

change.

COST ESTIMATE FOR CLOSURE:

Pursuant to 40 CFR 265.140, no estimate of closure cost is required for federal facilities.